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THE

HISTORY

OF

ANCIENT AND MODERN

WINES.

Anonymous

"NEC OMNIA DICENTUR, SED MAXIME INSIGNIA."—PLINII *Hist. Nat. XIV.*

LONDON:

BALDWIN, CRADOCK, AND JOY,

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PREFACE.

EXPECTATIONS are often raised by a title-page, which the contents of the volume will not be found to justify. Most authors, accordingly, in sending forth a work that has any pretensions to novelty, endeavour to conciliate the favour of their readers, by acknowledging the rashness of the enterprise, and expatiating on the difficulties which they have encountered in the execution of it. These excuses, it is true, are seldom regarded as very sincere; and perhaps the most prudent plan that a writer can pursue, is to submit the results of his labours without any preface or apology,—leaving the public to form their own judgment of his merits. On the present occasion, however, being conscious that the title which I have adopted may be thought assuming, and lead some to ask—

"Quid dignum tanto feret hic promissor hiatu?"

I cannot venture to deviate from the general practice; more especially as my performance, completed as it now is, differs materially in its nature from the undertaking in which I had at first announced my intention to engage.

Among the *desiderata*, which the great and comprehensive genius of Bacon indicated to his successors, is an '*Historia Vinaria*,' as well as '*Historia Cellaria, seu diversorum generum Potûs.*' The former deficiency, indeed, had been already, in some measure, supplied by the work of Bacci, which appeared nearly five and twenty years before the publication of the 'Novum Organum.' Though dismissed by Haller, with contempt, as a mere compilation, it comprises a variety of remarks on the wines of his time, and particularly those of his own country, which would be in vain sought for elsewhere. But the greater portion of the volume is certainly occupied with the repetition of what the ancients had written concerning the produce of the vine, and the customs which prevailed at their convivial meetings; and the modern part of the subject is treated in so unequal a manner, that, while a hundred pages and upwards are devoted to the account of Italian wines, those of France are discussed in less than three. If Bacon was aware of the existence of the book, which is very doubtful, these considerations may have induced him to pass it without notice, as being insufficient for the purpose that he contemplated.

Since the time of Bacon, numerous treatises have issued from the press, in which the properties of wine, and the process of its manufacture, have been more or less successfully investigated. The only dissertation, however, of any extent, on its history, which our language can boast, is that produced, about fifty years ago, by Sir Edward Barry. In consequence of the interest excited by the topic, this work has acquired a certain repute: and, at a time when I had but little acquaintance with the subject, it appeared to me so amusing and instructive, that I was led to entertain the idea of republishing it, with those omissions and additions which the

more recent improvements in physical science might render necessary. But I soon found, that such an attempt would have been like joining the living and the dead. The author, who was chiefly known in his profession as one of the last adherents of the Iatro-mathematical sect, had as antiquated notions in natural philosophy as in medicine. Nor was this demerit compensated by any unusual degree of learning or acumen; the particulars of his knowledge with regard to ancient wines being mostly borrowed from Bacci, and little improved in value by the observations which he himself contributed. Had he given a good abridgment of Bacci's history, he would have performed an acceptable service to the literature of his country. But, in place of this, he has launched into tedious disquisitions on matters remotely connected with the subject, and obtruded his flimsy criticisms on passages of ancient writers, which he either did not understand, or greatly misrepresented; the quotations and references being, for the most part, so exceedingly inaccurate, as to show plainly that he could have seldom consulted the originals. I therefore had proceeded but a very short way in the revisal of his 'Observations,' when I found myself obliged to lay them aside altogether, and to have recourse to more enlightened and faithful guides. At the same time, being persuaded that certain parts of his, or, rather, Bacci's plan, might be advantageously retained, I determined to follow it so far as to divide the history of wines into two distinct portions, — the ancient and the modern; by which arrangement, if my judgment do not deceive me, greater unity and clearness has been given to the whole.

Some readers, indeed, may be of opinion, that the former branch of the inquiry has been already abundantly discussed; and that few novel or important results are likely to be obtained by pursuing it further. But, notwithstanding the number and magnitude of the works which have treated of the subject, it will, I think, be admitted, on a more diligent examination, that not only much misconception prevails with respect to the characters of ancient wines, but that many valuable practical suggestions, which have

hitherto been overlooked, are to be found in the writings of the ancients, concerning the culture of the grape and the management of the vintage. Besides, a succinct account of their agricultural operations must be deemed an indispensable preliminary to the history of some of the principal modern wines.

In proceeding to the latter division of my task, I naturally turned to that country where the manufacture of wine is conceived to be best understood, and where it might be presumed, that every particular relating to the process would be determined with the utmost exactness. Although there can be no question that the French excel every other nation in this department of industry, it must be confessed, that their practice is not so uniformly skilful and consistent, as the perusal of their œnological writings would lead us to suppose; and that there is still great room for improvement, especially in the southern provinces. Nor have the chemists of France, valuable as the fruits of their labours undoubtedly are, yet solved all the problems relating to the theory of the art, with that precision which, considering the ample opportunities of experimental investigation they possess, they might have been expected to attain. Instead of observing for themselves, they have too often been content to report the observations of others; and have thus sanctioned and given currency to opinions which rest on no solid foundation. The same remark will apply to the writers of Germany, who are generally distinguished by the laborious accuracy of their researches; but who, in this field of literature, can claim no superiority over their neighbours. In Italy, again, the experiments of Fabbroni have contributed much to elucidate the physiology of the grape, and some of the more obscure phenomena of fermentation; but the only considerable practical treatise that has come under my notice, is the 'Enologia' of Count Dandolo, published at Milan about twelve years since, which, though somewhat diffuse, is sufficiently methodical, and contains many valuable hints for the improvement of the wines of his country.

Such being the actual state of information on this subject, it is evident, that whoever shall now resume the inquiry, — if he wishes to produce a system of instruction on the art of wine-making, complete in all its parts, and commensurate with the knowledge of the age, — must make himself acquainted not only with all that preceding authors have written on the theory, but with the details of the practice, as it is conducted in those countries which furnish the most approved models for imitation; and also examine more thoroughly, than has hitherto been attempted, the various changes that occur in the product of fermentation, after it is fully formed and matured by time.

For an historical essay like the present, such extensive researches were not required; — it being sufficient for the purpose to give a summary of the facts that bear most directly on the investigation, and to submit only those doctrines which seem to be satisfactorily established. These were, in most instances, to be collected from the works above alluded to. Where the assertions of authors were at variance, they have either been stated as doubtful, or been corrected by the intelligence obtained from persons practically conversant with the subject. But, for reasons on which it is needless to enlarge, intelligence procured in this way, even when no disposition to reserve or concealment exists on the part of the informant, cannot always be deemed the most authentic; and, where accuracy and minuteness are desired, personal observation will alone give security from error. A few remarks that were made in the course of my visits to the wine-districts of France, Italy, and Germany, have been occasionally introduced.

After I had acquired a general, and, I trust, not incorrect idea of the principles of fermentation, and the qualities of the wines produced in different climates, it became my study to convey to the reader the requisite information in the concisest manner. With the abundant materials that were before me, nothing could have been more easy than to have swelled the

volume by full descriptions of those processes which I have either briefly described, or merely hinted at. But such a mode of proceeding, though it might have rendered the publication more acceptable to a few, would certainly have detracted from its general utility. In the present state of literature, it is not prolix compilations from other books, or voluminous collections of trivial facts, that are wanted; but well-arranged digests of those only which are really useful and important to be known.

Impressed with this sentiment, I have taken considerable pains to select the most interesting particulars, and to verify the correctness of my statements; and have therefore seldom entered into controversial discussions respecting the various topics on which I was led to touch. At the same time I have facilitated the prosecution of the inquiry to others, by means of the references to the original sources of my information; which, however, I have been anxious not to multiply unnecessarily.

In a work embracing so great a variety of matter, and branching into so many details;—where the objects to be described are so changeable in their characters, and present so many shades of distinction, for which language furnishes no adequate terms;—it was scarcely possible to guard against occasional errors: but, if the general views that have been given be just, these errors as to particulars will prove of less consequence. Some inaccuracies, which have been observed since the larger portion of the sheets were printed, I have taken the liberty of rectifying in the additional notes inserted at the end of the Appendix.

The vignettes and other embellishments, with which the volume is decorated, are, with one or two exceptions, from the antique: but they owe much of their beauty to the correct and elegant taste of the artist, Mr. William Harvey, by whom they have been drawn and engraved. For this species of ornament the nature of the work seemed peculiarly well adapted. As some of the designs are partly illustrative of the text, it was suggested to me, that a short account of them would be desirable:

a list of the subjects has accordingly been annexed to the table of contents.

It only remains for me to acknowledge my obligations to the numerous friends, both in this country and on the continent, who have forwarded the object of my researches, either by the communication of original experiments and observations, and other valuable materials, or by the facilities they afforded me for gaining that practical knowledge, in which I was necessarily deficient. The polite and kind manner in which all my applications were received, and every inquiry answered, calls for the warmest expressions of my gratitude; as, without such assistance, the following pages, imperfect as they are in many respects, would have had infinitely fewer claims to attention.

Al. Henderson.

Curzon-Street, March 15, 1824.

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CORRIGENDA.

Page 28, at bottom, *for* 'caracatæ' *read* 'characatæ.'
— 83, line 12, *for* 'PEREGRINI' *read* 'PELLEGRINI.'
— 123, — 28, *for* 'symposi' *read* 'symposio.'
— 159, — 31, *for* 'Papillon' *read* 'Pupillin.'
— 236, — 33, *for* 'brancone' *read* 'broncone.'
— 256, — 18, *for* 'and' *read* 'and that.'
— 258, — 32, *for* 'VI.' *read* 'VII.'

HISTORY OF ANCIENT WINES.

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HISTORY

OF

ANCIENT AND MODERN WINES.

INTRODUCTION.

OF THE PRINCIPLES OF FERMENTATION, AND THE CONSTITUENTS OF WINE IN GENERAL.

HE invention of Wine, like the origin of many other important arts, is enveloped in the obscurity of the earliest ages of the world; but, in the history of ancient nations, it has generally been ascribed to those heroes who contributed most to civilize their respective countries, and to whom divine honours were often rendered, in return for the benefits which they had conferred upon mankind. Without dwelling on the fabulous traditions

which have been handed down to us on this subject, it may suffice to observe, that the use of wine could not have continued long unknown in those regions of the globe where the vine freely grows. The first portion of its fruit, which had been pressed by accident or design, and allowed to remain for a short time undisturbed, would be found to have acquired new and surprising properties; and repeated trials would soon prove the value of the discovery. By degrees, the method would be learned of preserving for constant use the beverage so obtained; and various processes would be resorted to for enhancing its grateful qualities: the knowledge of the art would rapidly spread; and its simplicity would recommend it to universal adoption. BACCHUS, after his education by the Nysæan nymphs, is reported to have traversed nearly the whole globe, introducing the culture of the grape, and diffusing refinement wherever he went.

Several of the writers of antiquity have been at much pains to describe the wines of their times, and to detail the various modes of improving the flavour of them, of preserving them from deterioration, and of restoring them when spoiled: but the fermentation of the grape was conducted on no fixed principles; and the numerous receipts for preparing the must, and for coating and perfuming the vessels destined to receive the wine, which are to be found in the works of CATO, VARRO, PLINY, COLUMELLA, and others, seem chiefly devised with the view of obviating and correcting the imperfections attendant on the mismanagement of the process. Yet these records are far from unimportant, as they serve to elucidate the nature and properties of ancient wines, and to explain many particulars connected with their use, which would otherwise remain unintelligible. They also acquire an additional interest from our being frequently able to recognise similar usages in the practice of modern times.

During a long succession of ages, the art of wine-making continued to be conducted according to these empirical rules; and the false doctrines of the elementary philosophy rendered abortive all

attempts to establish the theory on a clear and satisfactory basis. To LAVOISIER must be assigned the merit of having first pointed out the true principles on which it is to be explained. The labours of his successors have confirmed his speculations; and, in particular, the researches of CHAPTAL, CADET, THENARD, and GAY-LUSSAC, may be said to have given to the doctrine of fermentation nearly all the precision of which it is susceptible in the present state of chemical science. Indeed, an approximation to the truth is the most that can be expected on such a subject: the primary cause of fermentation, like that of other chemical agencies, will probably always remain hidden from our view; and we must rest satisfied with the knowledge of the principal conditions on which it depends, and by which the qualities of its products are influenced. Nor can our acquaintance with any of the great operations of nature be said to be more complete.

The investigations to which I have adverted having shown, that the phenomena of fermentation are governed by certain fixed laws, and having enabled us to determine the chief circumstances by which they are liable to be controlled and modified; the art of wine-making assumes a more simple and systematic form, and it becomes a comparatively easy task to arrange the principal varieties of wines according to their respective characters. We cease to regard the discordant practices of different ages and countries as involved in mystery, and dependent on peculiarities of soil and climate, of which no satisfactory explanation can be given: but, having once ascertained the quality of the materials, and the conditions in which they are placed, we can, in the majority of instances, confidently predict the general result; and, where the methods employed are defective, we can often suggest the means of remedying their imperfections, and of giving increased value to the products.

When the *must*, or juice which is obtained by the pressure of ripe grapes, is exposed to the temperature of 65° of FAHRENHEIT'S scale, it speedily begins to ferment; small bubbles first collect on

the top, and may be seen gradually issuing from the central parts of the liquor, and buoying up the husks, stones, and other grosser matters which it contains: as the disengagement of gas proceeds, a hissing noise is produced by the bursting of the bubbles, and a frothy crust, or scum, is formed by the viscid particles which they have carried to the surface. An increase of the temperature and bulk of the fermenting mass now takes place; the must loses its original consistency, and its saccharine taste,—acquiring a deeper colour, and vinous flavour, with an odour of spirit of wine, which becomes more perceptible as the process advances. At length these commotions of the fluid abate spontaneously; and after a few days', and sometimes after a few hours' rapid fermentation, the ebullition ceases altogether, the mass subsides to its former bulk, and the crust, and solid particles which disturbed the transparency of the liquor, are precipitated to the bottom of the vessel.

The juice of the grape, when subjected to chemical analysis, is found to consist of the following principal ingredients, viz. a considerable portion of water and sugar, a quantity of mucilage, some tannin, acidulated tartrate of potash, tartrate of lime, phosphate of magnesia, muriate of soda, sulphate of potash, and a particular liquid substance, which, by Chaptal and Proust, is termed the *sweet*, or *mucoso-saccharine* principle, and is regarded by them as the elementary constituent on which the fermentative process depends; but which Cadet, more justly perhaps, considers as a natural compound of sugar, mucilage, and extractive matter, having the property of fermenting, when sufficiently diluted with water. Dr. Macculloch, adopting the opinion of the latter chemist, looks upon the vegetable extract as the proper fermentative principle; and this view of the subject seems, in a great measure, confirmed by the experiments of Thenard, who succeeded in separating, from the juice of the currant, a substance which he conceives to be the true leaven, and which he describes as glutinous and tasteless, having a marked affinity for oxygen, and giving all the products of animal matter,

on exposure to heat. When saturated with oxygen, it becomes insoluble in cold water; but boiling water decomposes it, and changes it into fibrine; a portion of its carbon being disengaged during the process, in the form of carbonic acid gas. According to the same chemist, the substance in question serves to excite fermentation, in consequence of the power which it has of abstracting, by means of its hydrogen and carbon, a portion of oxygen from the sugar of the must; and this opinion is supported by the fact, that, even during the fermentative process, a part of the leaven is precipitated in the form of lees[a]. But, at all events, it is certain, that by the operation of this principle, whatever its nature may be, the divellent affinities of the constituent ingredients of the sugar are brought into action; a part of the oxygen and carbon which it contains being evolved in a gaseous form, while its hydrogen and the remaining oxygen and carbon are converted into alcohol[b]. The azote of the ferment is said by PROUST to escape with the carbonic acid gas[c].

In order to ensure a regular and complete fermentation of the must, the following are the principal requisites.

1. The grapes ought to be all equally trodden, and the vat into which the must is introduced ought to be filled as speedily as possible: for, in favourable circumstances, the fermentation proceeds with rapidity; and even the juice which flows from the grapes, in consequence of the pressure and motion to which they are subjected during carriage from the vineyard, will often work and ferment before it arrives at the vat.

It appears from the researches of FABBRONI, that the mucilaginous-extractive principle of the grape resides chiefly in the vesicles which constitute the central pulp, and that the most saccharine portion of the juice is contained in the intermediate substance

[a] Traité de Chimie, (2me édit.) Tom. III. p. 391.
[b] See APPENDIX, No. I.
[c] Journal de Physique, Tom. LVI. p. 113.

between the central and cortical textures; that the cortical substance gives also a saccharine juice, but more acidulous than the other; that, on the inner surface of the skin, the resinous-extractive or colouring matter is deposited; and that the organized insoluble parts contain a substance resembling the gluten of wheat[d]. When a grape is gently squeezed, the sweetest portion of the pulp will be found to be the first which is protruded; and it is only by increased and continued pressure, that the extractive and more acid contents of the central vesicles and cortical substance will be forced out. These nice observations of the Italian professor explain, in the most satisfactory manner, the reason why the juice which is obtained previously to the treading of the grapes, undergoes little or no fermentation; and they further demonstrate the necessity of a full and thorough pressure of the vintage, in order to effect that due admixture of the saccharine and extractive principles which is essential to a perfect fermentation of the must.

2. The temperature most favourable to vinous fermentation appears to be the sixty-fifth degree of Fahrenheit. Below that degree it is languid; above, it becomes violent; and, at a very high, or a very low temperature, it will no longer take place. If the temperature be under 60°, when fermentation proceeds with difficulty, the deficiency may be remedied by heating the air of the cellar, or by removing the vessels to a warmer situation, or by adding to the fermenting mass a quantity of boiling must. But, as soon as the fermentation has commenced, the temperature quickly increases; and, in certain cases, has been known to rise as high as 95° or 99°. The experiments of the Abbé Rozier prove, that even the temperature of the atmosphere, during the vintage, has a considerable influence on the fermentation of the grapes; and that the process is always slower in proportion to the coolness of the weather at the time when they were gathered.

[d] Dell' Arte di fare il Vino, Firenze, 1787, p. 18.

3. The contact of the external air is necessary, in the first instance, for the production of fermentation; for it was ascertained by Gay-Lussac, that, when grapes were bruised in a vessel from which the atmospherical air had been carefully excluded, no fermentation took place, although the temperature was raised to upwards of 80°; but, on introducing a few bubbles of oxygen gas, it immediately commenced, and a copious evolution of carbonic acid gas ensued[e]. From this decisive experiment we may infer, that, in the process of treading the grapes, a portion of air is absorbed; and the supposition is, in a great measure, confirmed by some remarkable circumstances which Mr. Knight has stated with respect to the manufacture of cider. Having observed, that the expressed juice of the apple, when exposed during a few hours to the air and light, became deeply tinged, less fluid, and more saccharine than before, he placed a quantity of the reduced pulp in a closed vessel, and found that about one-fifth or sixth part of the enclosed air disappeared, and that the specific gravity of the liquor was increased from 1064 to 1073[f]. But, after fermentation has been established, the free exposure of the must is not only unnecessary, but is attended with the inconvenience, that it allows a great proportion of the alcohol and aroma to evaporate, or escape along with carbonic acid which is disengaged during the process. That the loss of the most precious ingredients of the wine, which thus takes place, is considerable, has been clearly proved by Chaptal, who remarked, that, when he suspended vessels containing pure water immediately over the crust of the fermenting liquor, the water soon became impregnated with alcohol, and probably, also, with some portion of extractive matter; for it was convertible into vinegar[g]. Hence it comes, that wines, which have been made in vessels so closed as merely to allow the carbonic acid gas to escape very gradually,

[e] Annales de Chimie, Tom. LXXVI. p. 245.

[f] Treatise on the Culture of the Apple and Pear, (3d edit.) p. 87, 89.

[g] L'Art de faire le Vin, (2me édit.) Paris, 1819, p. 135.

and with some difficulty, are commonly of a more generous quality, and of a higher flavour, than those which have been fermented in open vats. When the latter are used, CHAPTAL recommends the practice of covering them with boards and linen cloths.

4. In general, fermentation is more prompt and lively, in proportion to the bulk of the fermenting mass. In a cask it proceeds more slowly than in a vat, but the alcohol and aroma of the wine are better preserved. When the grapes are either too green, or too ripe, and when the weather is cold, the preference is to be given to large vessels.

5. The saccharine and mucilaginous-extractive principles, water, and tartar, are the four elements of the grape which seem to have the chief influence on its fermentation; for too large or too small a proportion of any one of these ingredients will retard and check the operation. Thus, when the must is too thick, it experiences but an imperfect fermentation; a portion of the sugar remains undecomposed, and a syrupy wine is the result. When, on the other hand, the must is too thin and watery, fermentation takes place with difficulty, and a weak and indifferent wine is produced. In this case the deficiency may be obviated by boiling the must, and allowing the superabundant water to evaporate; or by merely throwing in a portion of must which has been thus inspissated; or, lastly, by adding a quantity of sugar, as is the common practice in cold climates, where the grapes seldom reach their full maturity. In some places baked gypsum is used, in order to absorb the excess of humidity; in others, the grapes are partially dried before they are trodden. The addition of tartar accelerates fermentation, particularly if the grapes abound in the saccharine principle.

From the preceding observations it is evident, that the principal results of the fermentative process are the production of alcohol by the decomposition of the sugar, and the separation of the mucilaginous-extractive matter of the must in the form of lees. Whether any other important chemical changes take place, has not been

perfectly ascertained; but, as the wine has often, independently of its alcohol, a totally different flavour from the grape with which it was made, we may presume, that some of the other principles of the must enter into new combinations. Beside the constituents which have been already enumerated as existing in the must, certain wines contain gallic acid, and in all wines a portion of malic acid, and some traces of citric acid, may be perceived; but in the best wines the quantity is inconsiderable, and it is generally in an inverse ratio to that of the saccharine principle or alcohol. Some wines are distinguished by a high perfume, and grateful aromatic flavour; others by their rough and astringent taste. In dry wines the saccharine matter has been entirely decomposed; in sweet wines a portion of the sugar remains in its original state. These, and other differences in the character of wines, may all be traced to peculiarities in the nature and preparation of the grapes from which they are manufactured, or to particular modes of conducting the fermentation;—in other words, to the constitution of the must, or to the chemical changes which this liquor is made to undergo.

I. The *constitution* of the must is liable to be influenced by a variety of circumstances connected with the culture of the vine. Of these I shall endeavour to give such a brief account as may serve to illustrate the different branches of the inquiry on which I propose to enter in the following chapters.

1. It is sufficiently obvious, that the quality of the grape must always, in the first instance, be determined by the species or variety of the vine which produces it. Of some kinds the fruit is naturally hard and rough; of others, it is sweet and mild: some varieties contain much saccharine matter; in others, the mucilaginous-extractive principle abounds. Nor can these distinctions be, in all cases, ascertained by the taste; for two grapes may appear almost equally sweet, and yet on examination present very different constituents. Thus the ripe *muscadine* grape of Fuencaral was found

by PROUST to yield 30 per cent of solid sugar, and the wine which is made from it is always very sweet and generous: but the *chasselas* of Fontainebleau, though an exquisite grape to the palate, affords very little sugar, and the wine which it furnishes is dry and indifferent; for its sweetness proceeds not so much from the proper sugar of the grape, as from the superabundance of the mucoso-saccharine matter. The varieties of the vine are very numerous. CHAPTAL, when Minister of the Interior, collected, in the nursery of the Luxembourg, upwards of fourteen hundred sorts, from the different provinces of France, of which about one thousand appeared worthy of a particular description; and DON SIMON DE ROXAS CLEMENTE, to whom we are indebted for the most scientific work on the subject, enumerates about two hundred and fifty varieties, as cultivated in the kingdom of Andalusia alone; and of these he has given the botanical characters of one hundred and nineteen. In most vineyards a number of varieties are cultivated indiscriminately, and the produce of the whole is mixed together in the vintage; but, in those districts where the management of the vine is properly understood, this practice is reprobated, and the best sorts only are selected. Independently of other differences, it may be remarked, that the red grapes ripen generally ten or twelve days sooner than the white; and it is therefore of importance to separate them from the latter, in the planting of a vineyard.

2. The climate most congenial to the culture of the vine extends from the 35th to the 50th degrees of north latitude; and it is between these points that the most celebrated vineyards, and the countries richest in wine, are placed. In more northerly situations, the grape seldom acquires a due maturity; and the wines that are occasionally made from it, are weak, acescent, and destitute of the generous flavour which distinguishes those produced in more favoured regions. In warmer climates, on the other hand, the saccharine matter predominates, and becomes too concentrated to experience a complete decomposition. When the vine is transplanted from a southern to

a northern latitude, the quality of its fruit soon becomes impaired; but it improves when carried from a cold to a warm climate. PLINY assures us, that the rich grape of the Tauromenian hills degenerated in most parts of Italy, and that the Falernian grape lost its excellence, when removed from one end of the Campania to the other[h]. The *chasselas* of Fontainebleau is believed to be the progeny of the Cyprus grape, with which FRANCIS I. planted his vineyards of Fontainebleau and Couci; and one of the richest Malaga wines is furnished by a grape that is said to have originally come from the banks of the Rhine. CHAPTAL remarked, in the course of his experiments on the produce of different sorts of grapes, that the must obtained from those which were grown on plants from the south of France had a greater consistence, than that which the vines from the northern departments afforded[i]. But his observations do not appear to have extended beyond the second year from the transplantation; and it may be presumed, that the distinction in question would in a short time cease to be perceived.

3. Of all fruits, the grape is, perhaps, the most susceptible of alteration in its nature, from the qualities of the soil where it grows; and the immense variety of vines ought probably to be referred to the operation of this cause, rather than to original differences in the species, or to the modes of culture to which they are subjected. In general, it may be observed, that the lighter and more porous soils are best suited to the vine; for, although the plant will shoot up with great vigour, and yield an abundant crop of grapes, in rich and moist ground, yet the excellence of the fruit is commonly in the inverse ratio of the luxuriance of the growth. Strong argillaceous loam is very injurious to the vine; as it not only checks the free expansion of the roots, but, from its retaining an inordinate quantity of moisture, keeps them in a state of constant and destructive humidity, and often imparts to the wines a peculiar earthy taste,

[h] Hist. Nat. xiv. 2.

[i] L'Art de faire le Vin, p. 118.

such, for instance, as we perceive in almost all those which are produced at the Cape of Good Hope. In calcareous soils, on the other hand, the vine flourishes, and the liquor which it yields is high-flavoured and spirituous: as such grounds readily absorb moisture, they are advantageous in countries where heavy rains prevail. But a stony or gravelly soil is still preferable; as it allows the roots to penetrate freely in all directions, while a sufficient degree of moisture reaches them; and they are protected from the scorching influence of the sun, by the stratum of pebbles or debris, which forms the surface, and which, in the colder climates, may be useful in reflecting the heat towards the branches and fruit of the plant. Volcanic soils, also, would appear to be extremely favourable to the successful culture of the vine; for some of the richest wines of the south of France, the wines of Madeira, and the best wines of Italy and Sicily, are all derived from such soils. "In the southern departments," says Dussieux, "the vine flourishes in volcanic soils, in flinty grounds, and in quartzose sand, mixed with vegetable mould, and a small portion of alumine. Towards the centre of France, it thrives on argillaceous slate, and, above all, on chalky rocks, which are easily decomposed by the contact of the air. In the north, fat sand, with a mixture of calcareous loam, is preferred. But the chief consideration is to find a soil which is sufficiently porous, and at the same time retaining but little moisture; and for this purpose almost every combination of earths and rocks will answer[k]." Occasionally it may be observed, that the vine will produce excellent fruit on rich lands where there are substrata of gravel or rock.

4. Differences in the exposure and inclination of the ground will have a material influence on the qualities of the grape. An open hilly country is preferable to a plain; and those elevations which are most freely exposed to the action of the sun's rays, and are at

[k] Traité sur la Culture de la Vigne, Tom. I. p. 247.

the same time sheltered from the cold winds and frosts, are the most advantageous. The requisites in question are found in a south-eastern aspect, which is therefore esteemed as the best situation for a vineyard; while a northern exposure is generally regarded as highly prejudicial to the vine. Yet these rules are not without exceptions; for some of the best wines of Champagne are grown in a northern aspect, and several of the first vineyards of Burgundy lie towards the east: but, in such cases, we may fairly presume, that these apparent disadvantages of situation are counterbalanced by favourable peculiarities of the soil, or other unknown circumstances.

5. It may appear almost superfluous to remark, that the characters of the grape must vary according to the nature of the seasons. In a cold year it will not attain its proper maturity, and will be deficient in flavour and saccharine matter. Hence the wine which it furnishes will be weak and harsh, and liable to ropiness and acescency. When the season is rainy, the produce will be increased; but it will be poor and insipid, and will generally be found to contain a large portion of malic acid, which gives to it a peculiar flavour, always most perceptible in those wines that are most devoid of spirit. A moderate degree of humidity, however, is essential to the welfare of the vine. In those climates, accordingly, where great droughts prevail, as in Persia, and the neighbourhood of Malaga, the earth is formed into a dish around the plant, in order to collect and retain the rain which falls during spring. High winds and fogs are always very injurious to the vine.

6. It has been already observed, that the grapes which grow on very rich soils are of inferior quality: all strong composts are, therefore, regarded as prejudicial, and in some of the principal wine countries the use of them is strictly prohibited. "By a public decree," says Olivier de Serres, "dunging is forbidden at Gaillac, lest the reputation of the white wines, which its vineyards furnish to the neighbouring towns of Toulouse, Montauban, Castres, &c., should

be depreciated[l]." In the district of the Alto Douro, where the Port wines are grown, the practice of dressing the vines with fresh litter (*o lançaremse estrumes nas vinhas*), which formerly prevailed to a great extent, has been long discontinued, on account of its injurious operation on the quality of the fruit[m]. But the German agriculturists are at variance with the French and Portuguese on this point; for RITTER informs us, that the wine-growers on the Rhine are decidedly of opinion, that without animal manure little wine will be obtained, and that of a bad and meagre quality[n]. Possibly the difference in soil and climate may, in some measure, serve to reconcile these conflicting testimonies. The general rule, however, still holds good:—Wherever an undue degree of richness has been imparted to the soil, the quality of the wines has been found to degenerate in a corresponding ratio; and if animal manure is to be applied, it ought to be in a state of decomposition, and mixed with earth, turf, or sand, according to the method followed in the best wine countries. In some places the ashes of sea-weed have been used with success; and vegetable manure, in the form of mould, may be always safely employed.

7. The modes of planting, of training, and of propping the vine, which vary in different countries, but, above all, the methods of pruning it, have a great effect on its produce. The fruit of high vines never ripens so well as that of such as are trained low, which receive the benefit of the reflected as well as the direct solar rays, and of the warm exhalations that ascend from the earth. In those districts where the culture of the plant is best understood, it is seldom allowed to rise higher than two or three feet: at Tokay, it is cut and formed into a pollard at a span from the ground: and, in general, it may be established as a maxim, that the nearer

[l] Théâtre d'Agriculture, (ed. 1600,) p. 175.

[m] Memorias Economicas da Academia Real das Sciencias de Lisboa, Tom. III. p. 89.

[n] Weinlehre, Mainz. 1817, p. 30.

its branches are to the soil, provided they do not come in contact with it, the better will be the fruit produced. Where it is permitted to grow without check, it will ascend to the top of the highest trees, and distribute its shoots in all directions; but the grapes which it bears will become proportionably bad, and the wine prepared from them will be hard and austere: for the greater the quantity of fruit, the worse the quality will prove. Even in the southern provinces of France, when the vine is allowed to exceed two metres in height, it gives a wine of little value or durability*.

II. The time of year when the vintage is collected, the preparation of the grapes previously to their being trodden and pressed, and the various manipulations and processes adopted in their fermentation, all tend to determine the character of the wines produced.

1. If it be the object of the manufacturer to obtain a dry and full-flavoured wine, he will gather the grapes as soon as they have acquired their proper maturity, and before they begin to shrink and wither on the stalk; or, if he wish to have a very brisk wine, he may collect them before they are perfectly ripe: but, if a sweet wine be desired, he will postpone the vintage to the latest possible period. This option, however, is left him only in those countries where the fruit of the vine ripens very early; for, in more northern climates, the grapes must frequently be gathered in a green state, otherwise they will rot on the stalks. In general, dry and clear weather ought to be chosen for the vintage; but where a slow and imperfect fermentation is required, as in the case of the brisk Champagne wines, the grapes that are collected during a fog, or before the dew that has settled on the vines is dispersed, are found to answer best, and yield the largest quantity of must. Formerly, the time of commencing the vintage in some of the principal wine countries, as, for example, in Burgundy and Gascony, used to be

* Traité sur la Culture de la Vigne, Tom. I. p. 294.

fixed every season by the municipal authorities; and a similar custom prevailed, if I mistake not, till within these few years, on the banks of the Rhine.

2. In some places the stalks are twisted after a certain period, and the grapes are suffered to remain exposed to the sun till they become half-dried; in others they are gathered when ripe, and spread to dry upon straw; by which means the juice acquires a higher degree of consistence and richness. For the best wines of Gascony the grapes are carefully picked, those which are green or rotten being rejected; and the vintage often continues during a period of two months. In Burgundy it is finished, in the different districts, in a few days.

3. The vat, into which the must is introduced, should be filled in twenty-four hours at farthest, and the fermentation will be rendered more equal and perfect, if the contents be occasionally stirred; but the duration of the process will depend on the quality of the grapes, and of the wine sought to be obtained. Weak wines require but a short fermentation; and colourless wines should scarcely be allowed to remain any length of time in the vat. In proportion as the must is less saccharine, a shorter period will suffice. The lighter wines, the *vins de primeur* of Burgundy, for example, will not bear the vat longer than from twenty to thirty hours. If we desire to have a brisk wine, the contents of the vat must be drawn off into the cask, before the fermentation has worked itself out. In general, the process may be considered as terminated, when the saccharine flavour of the must has disappeared, and the liquor has acquired a distinct vinous taste.

4. The stalks of the grapes, when added to the must, operate as a powerful leaven, and augment the strength of the wine; but to the weaker sorts they are apt to communicate a harsh and austere flavour, in consequence of the tannin and extractive matter which they contain. In the preparation of Port wines they are always used; but in the manufacture of the more delicate red wines of

Bordeaux, they are generally excluded. For the white wines of the same district, however, they are thought to be advantageous, rendering them less apt to spoil. Yet the wines of the Rhine, which are distinguished by their great durability, are not fermented with the stalks, and would probably not bear the addition. RITTER even deems it a mere prejudice, to suppose that the stalks are conducive to the fermentation and keeping of the wine[p]. Where the mucilaginous-extractive matter already exists in excess, they may, no doubt, prove injurious; but, on the other hand, where the saccharine principle predominates, they must contribute to the strength of the wine.

5. The colour of the wine is evidently derived from the skin of the grape; for the juice of red or black grapes, when fermented without the hulls, gives a wine equally colourless as that which is procured from white grapes. To this rule, however, the *tintilla*, or *teinturier* grape, furnishes an exception, having the colouring matter diffused through the pulp. Wine becomes more highly tinged in proportion as the grapes are riper and less watery, and in proportion to the quantity of alcohol which is generated during the fermentative process; and it is only by a complete fermentation that the full colour of the skin is extracted. Hence it becomes very difficult to produce a wine that shall be both red and brisk at the same time; but a light tinge may be communicated by a strong pressure of the grapes.

6. All wines are distinguished by a peculiar aroma, or perfume, which often constitutes one of their most valuable qualities. This odour differs, in many cases, from the flavour of the liquor, and is generally more powerful in the weaker wines than in the strong; probably in consequence of its being, in a great measure, dissipated during the more tedious fermentation to which the latter are subjected. On what principle the aroma depends, or in what part of

[p] Weinlehre, p. 51.

the grape it resides, has not as yet been satisfactorily ascertained; but that it is in some way connected with the colouring matter, seems to be proved by the fact of its being most sensible in the lighter red wines, and by the loss of perfume and flavour which those wines sustain, when they become tawny, that is, when the colouring matter is precipitated. In some experiments, however, which Dr. Prout had the kindness to undertake for me, it was found, that, when the whole of the latter principle had been separated by animal charcoal, and even after the wine had been distilled, the original odour yet continued so strong, that any one accustomed to the smell of wines might have been able to distinguish it in the remaining fluid. The same intelligent chemist has also remarked, that the fixed alkalies, when added to wine in sufficient quantity to neutralize the acids, modify the aroma in a very peculiar manner; probably by the power they possess of decomposing the delicate principles on which it depends. When wines are distilled, both the spirituous and the aqueous portions retain more or less of the flavour and odour of the liquor; but the aroma of the spirit is penetrating and volatile, like that of an essential oil; while the odour of the residuum is of a fixed nature, resembling, in some instances, that which is given out by a decoction of raisins. A writer on wines, whom I have already had occasion to quote, is of opinion, that the aromatic principle abounds chiefly in the skin of the grape; and suggests the expedient of suspending some of the ripest and most odoriferous bunches in the cask after the first fermentation has subsided, in order to heighten the perfume of the wine[q]. A similar practice, indeed, has been long known in the manufacture of the *vini raspati* of the Italians, and *vins rapés* of the French.

When the fermentation in the vat has ceased, the wine is drawn off into casks, where it undergoes a new elaboration, which renders it again turbid, and produces a repetition, in a slight degree, of all

[q] Ritter, loc. cit. p. 57.

the phenomena that marked the former process. Though the liquor may have no longer a saccharine taste, yet, in most wines, a portion of the sugar will be found to remain undecomposed: this will be acted on by the mucilaginous-extractive matter which still exists in solution, and a disengagement of carbonic acid gas, with a fresh deposit of sediment, will be the consequence. By degrees these movements will become less perceptible; but the secondary, or insensible fermentation, as it has been denominated, will still go on, and, in the stronger wines, will continue during a long term of years, in the course of which they become much ameliorated; probably in consequence of the more intimate union of the alcohol with the acid and mucilaginous principles. A portion of the colouring matter and tartar is precipitated, the liquor loses its harshness, and the aroma and flavour that are peculiar to it become more apparent. These changes may be accelerated by various artificial methods, especially by the agitation of the lees, which always contain a quantity of fermentative matter, and by the assistance of heat. Hence we may discover the reason why certain strong and austere wines are so much improved and mellowed by being exported on the lees to a warm climate, while the lighter and more delicate wines are generally injured by being made undergo a similar process, or even by the motion occasioned by the removal of them to any considerable distance.

When the wine is thought to have attained a sufficient degree of maturity, it is freed from the lees by being racked into a clean cask; where, in order to prevent it from experiencing a renewal of fermentation, it is subjected to the operation of *sulphuring*. This process is commonly performed by means of sulphur matches, which are burnt within the cask; but, in some places, a small quantity of *stum* wine, or must, which has been so strongly impregnated with sulphurous gas as to be incapable of fermentation, is added to the wine, which answers the same purpose. As the burning of the matches is apt to communicate an unpleasant flavour to the wine,

some chemists have recommended the substitution of the sulphurous acid, or certain metallic oxides, or neutral salts; such, for example, as the black oxide of manganese, the sulphite of potash, &c.[r]; sometimes the sulphur matches are manufactured with the addition of various aromatic ingredients.

For certain wines these operations suffice; but the greater proportion require to be further clarified, or *fined*, before they attain a due brightness. This is accomplished by the introduction of a small quantity of certain coagulable or solid substances, which, by their chemical or mechanical action, unite with such matters as disturb the purity of the liquor, and precipitate them to the bottom. Among the coagulable substances, isinglass, and the whites of eggs, are those in most general use; but in warm climates they have been found objectionable, on account of their putrescent tendency, and gum arabic has been recommended as a substitute for them. In Spain, the white wines are sometimes clarified with fuller's earth; in other places, powdered marble, gypsum, or heated flints, are thrown into the wine for the same purpose.

The effects and the design of the two processes just described are the same: they both reproduce a certain degree of turbidity in the liquor, which, after a time, ceases, leaving it clearer than before; and they both serve to secure its durability, by separating those matters which are most apt to cause deterioration. In the sulphuring of wine, the acid which is generated appears to exert its chief agency on the portion of mucilaginous-extractive matter which remains suspended in the liquor; and, by rendering it insoluble, to deprive it of the power to re-excite fermentation. In the operation of fining, by means of isinglass and whites of eggs, on the other hand, the tannin and alcohol of the fluid act upon the gelatine and albumen, and form reticulated coagula, which envelope and carry down the solid particles that endangered the safety of the

[r] Remarks on the Art of Making Wine, by John Macculloch, M.D. p. 133.

wine. The agency of the other substances which have been mentioned seems to be merely mechanical.

If the constituents of the wine are duly balanced; if it has been thoroughly clarified, and freed from the superabundant extractive matter; or if it contains a larger proportion of sugar than the leaven, which may still exist in it, is capable of decomposing; it will keep an indefinite length of time, without experiencing any deleterious change. But when these requisites are wanting, when the fermentation has been imperfect, and when a quantity of leaven remains in a free state, the wine is apt to become *ropy*, or *sour*. The former of these disorders, which is of most frequent occurrence in wines that have undergone an incomplete fermentation, or in sweet wines that have been bottled too soon, shows itself by a milky or flaky sediment, and by the oily appearance these liquors assume when poured out; and arises from a partial combination of the mucilaginous-extractive and saccharine principles of the wine. The latter species of degeneration is caused by the conversion of the alcohol into acetic acid.

Weak wines, which generally contain an excess of mucilaginous matter, and do not well bear the repeated clarifyings that would be necessary for overcoming it, are the most liable to spoil: the leaven, as it separates, renders them thick and muddy; they acquire an acidulous, or pricked taste; and end by throwing down the colouring matter, and becoming entirely vapid. Strong wines, on the contrary, when imperfectly fined, or otherwise unskilfully managed, are more disposed to undergo a complete acetous fermentation. Of this change the first indication is furnished by the appearance of a dry greenish substance on the top of the liquor, to which the name of the *flowers* of wine has been assigned, and which originates from a portion of the leaven assuming a fibrous and concrete form. The wine then becomes more or less turbid; flakes are formed near the surface, which unite and subside into a viscous sediment; and the alcohol gradually disappears, and is

replaced by acetous acid. If this process take place with the contact of the external air, a distinct commotion is perceptible throughout the fluid, somewhat similar to that which occurs in vinous fermentation; and, if the mass be considerable, the temperature is greatly increased, and small bubbles are disengaged, which, on examination, will be found to consist of alcohol and carbonic acid gas.

In certain points of view, the acetous fermentation may be considered as a continuation of the vinous. Both are dependent on the presence of the same leaven, and on a certain degree of heat; in both an absorption of oxygen takes place; and both are accompanied by agitation of the fermenting mass, and by a considerable evolution of caloric. In the one case, the component parts of the sugar enter into new combinations, and form carbonic acid and alcohol; while, in the other, they resume part of the oxygen which had been previously given out, and are changed into vinegar. It has been established by the clearest and most decisive experiments, that, during this conversion, the oxygen of the atmospheric air is absorbed in large quantity; and that, without its free admission, the conversion of the alcohol will be incomplete. But, although this be true, in general, with respect to the manufacture of vinegar, yet it is equally certain, that wines closed in casks or bottles, from which care has been taken to exclude the external air as completely as possible, will occasionally degenerate into the acid state; especially if they be exposed to a high temperature, and to any causes that tend to excite agitation in the lees. In these cases, however, it may be observed, that there is generally a small portion of air confined along with the liquor, which may be sufficient to produce acescency in a fluid otherwise predisposed to experience this species of degeneration; and, in many instances, we may presume, that the process of acetification had begun before the wine was introduced into the cask or bottle.

Certain wines, especially those of Burgundy and the Rhone, are apt to acquire, both in the wood and in bottle, a peculiar *bitterness*,

which renders them unfit for use. As this alteration occurs only after the wines in question have been kept a considerable time, and have deposited a crust, CHAPTAL is of opinion, that it proceeds from the development of the acerb principle naturally inherent in those wines, which, in their more recent state, is masked by the free saccharine matter they contain. But such an explanation of the disorder is far from satisfactory; for, were it merely a consequence of the insensible fermentation, we should find, that, in proportion as the crust was thrown down, and the liquor was clarified, the bitterness would invariably become more intense. On the contrary, it will sometimes disappear spontaneously, after it has continued a few years; and may almost always be removed by a repetition of the processes of sulphuring and fining, or by mixing the wine with fresh lees. A more probable supposition seems to be, that this species of imperfection originates from the formation of a quantity of citric ether, which is known to have an extremely bitter taste; and which, being but little soluble in water, and of greater specific gravity, will, in the course of time, be precipitated, along with the other matters that constitute the sediment of the wine: and the above conjecture is, in some degree, confirmed by the fact, that the bitterness of such disordered wines is much increased, when their lees are disturbed.

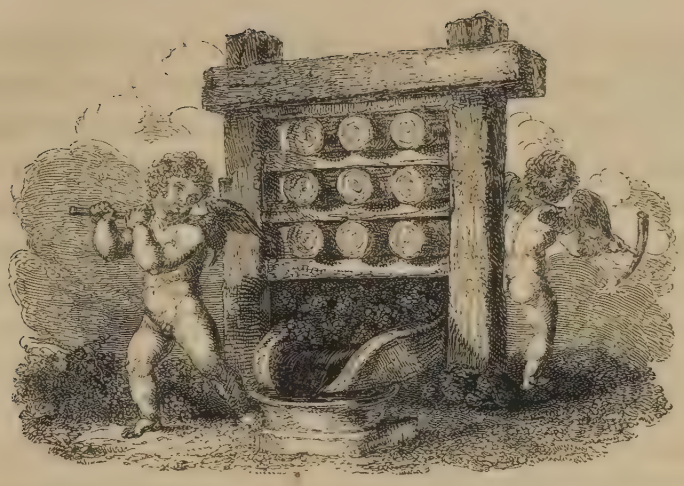
The chief product of the vinous fermentation, as has been already remarked, is the alcohol, which may be separated from the wine in a pure state, by the process of distillation. The strong wines of the south give the largest quantity, especially those of Spain and Languedoc, which yield one-third of proof spirit[3]. Some chemists have doubted whether the alcohol was not, in a great measure, formed during distillation: but recent experiments have shown this opinion to be altogether groundless; and, indeed, it could only have originated from very confused notions on the subject

[3] See APPENDIX, No. II.

of fermentation. The ancients seem to have been altogether ignorant of the art of distilling, which was probably an invention of the Arabians, as the first allusion to the process occurs in their writings. From a passage in the *Testamentum Novissimum* of RAYMOND LULLY, who flourished in the thirteenth century, we may infer, that the production of brandy and alcohol from wine was familiar to his contemporaries[t]; but the precise date of the discovery remains uncertain. When first introduced, *burnt wine*, as it was called, appears to have been principally used as an antiseptic and restorative medicine; and the most extravagant panegyrics were bestowed on its virtues. It was described as a sovereign remedy in almost all the disorders of the human frame; it was commended for its efficacy in comforting the memory, and strengthening the reasoning powers; it was extolled, in short, as the elixir of life, and an infallible preservative of youth and beauty[u]! How little it merited such praises, the experience of later times has too fully demonstrated.

[t] "Recipe nigrum nigrius nigrō [*h. e.* vinum nigerrimum], et distilla totam aquam ardentem in balneo: illam rectificabis quousque sine phlegmate sit."—*Ed. Argentorat.* 1571, p. 2. apud CHAPTAL, loc. cit. p. 327.

[u] BECKMANN'S Geschichte der Erfindungen, I. Bd. p. 36; II. p. 279. CANONHERIUS de admirandis Vini Virtutibus, lib. i. cap. 5.



HISTORY OF ANCIENT WINES.

CHAPTER I.

OF THE VINEYARDS OF THE ANCIENTS.

F the various branches of classical study there is none which brings us into so close an intimacy with the ancients, as the perusal of the treatises which they have left, concerning their systems of husbandry. When we trace the pages of Cato, Varro, or Columella, we insensibly enter into the spirit of their agricultural pursuits; we accompany them, as it were, into the fields; we visit their plantations, and inspect their flocks; we witness the successive labours of the year; we watch the progress of their crops, and partake of the pleasing anxieties of their harvests; we return with them to their dwellings; we assist them in their household offices, and become familiar with the details of their domestic economy. Nor does the knowledge

thus obtained serve merely to gratify our curiosity; for many of the precepts delivered by the above-mentioned authors are marked by the soundest judgment, and might be adopted with advantage in the practice of the modern farmer. The culture of the vine, in particular, was an object of diligent attention with them; and the directions which they give for the training and management of the plant, in almost every possible situation, are very ample. That their views were occasionally erroneous, may be readily imagined; but, considering the state of the physical sciences at the period when they wrote, they must be allowed to have possessed a very full knowledge of the subject. In fact, it may be doubted, whether any branch of agriculture have remained so stationary, or been so little influenced by the improvements of recent times; for, throughout a great part of Europe, the usages of the ancients with respect to the treatment of the vine are still observed to prevail; and it is only in those countries where commerce has led to the diffusion of useful inventions, and furnished a stimulus to increased exertion, that better methods have been introduced.

Being aware, how much the health of the vine and the qualities of the grape are liable to be affected by different soils and exposures, the ancients were at great pains in choosing a proper situation for their vineyards. They condemned those lands which were composed of stiff unctuous clay, and subject to much humidity; selecting such as were not too thin, but light, and sufficiently porous to admit the requisite moisture, and allow of the free expansion of the roots. A chalky or marly loam, and a due admixture of mould with gravel or loose pebbles, were deemed favourable; and the advantages of soils formed of rocky debris, or resting on beds of flint, were not overlooked[a]: but the preference appears to have been given to the

[a] "Quis enim vel mediocris agricola nesciat etiam durissimum tophum, vel carbunculum, simul atque sunt confracti, et in summo regesti, tempestatibus, geluve, nec minus æstivis putrescere caloribus ac resolvi, eosque pulcherrime radices vitium per æstatem refrigerare, succumque retinere. —— Est autem, ut mea fert opinio, vineis amicus etiam silex, cui superpositum est modicum terrenum," &c.—Col. iii. 11.

black crumbling soil of the Campania, which consists of decomposed tufa, and which, from its colour, received the name of *pulla*. A soil impregnated with bitter and saline substances was believed to impair the flavour of the wine[b].

With respect to the comparative excellence of different exposures, the general voice seems to have been in favour of a southern aspect. Some writers, it is true, recommend the east; and others advise the placing of vineyards towards the north, as the quarter where the most abundant crops may be expected. But on this head it is well observed by GRÆCINUS, that the best rule is to plant the vines towards the south in cold situations, and towards the east in warmer regions, provided they be not too much exposed to the south and east winds; in which case it would be safer to allow them to face the north or west[c]: and FLORENTINUS decides, that the choicest wine is produced from vines planted on dry sloping grounds, that look to the east or south[d]. The superior flavour of wines growing on the sides of hills, compared with those raised on the plain, was universally admitted[e].

Various modes of planting and training the vine were in use among the Romans. It was propagated either by cuttings (*malleoli*), by layers (*mergi*), or by grafts, which were all selected from the best fruit-bearing branches. For laying out new vineyards, or recruiting the old, the Italian husbandmen gave the preference to quicksets, as they were more hardy, and sooner in a condition to yield fruit, than cuttings; but in the provinces, where no pains were taken to form nurseries of vines, the latter were employed[f].

[b] Salsa autem tellus, et quæ perhibetur amara,
Frugibus infelix: ea nec mansuescit arando,
Nec Baccho genus, aut pomis sua nomina servat.—VIRGIL. *Georg.* ii. 238.

[c] COLUM. iii. 12. [d] Geoponica, v. 2.

[e] "Montibus clivisque difficulter vineæ convalescunt, sed firmum probumque saporem vini præbent. Humidis et planis locis robustissimæ, sed infirmi saporis vinum, nec perenne faciunt."—COLUM. *de Arbor.* 3.

[f] COLUM. iii. 14.

A favourite way of disposing the plants was in the form of a quincunx, with sufficient space between the rows to plough the ground in diagonal furrows. In lean land, five feet were deemed a sufficient interval; but, in rich soils, seven feet were allowed. The intermediate space was frequently employed for raising a crop of beans or pulse: but this practice was reprobated by experienced husbandmen, as tending to deprive the vine of its proper nourishment[g]. In those vineyards where the land was ploughed, the vine was left without support, and raised upwards; in others, it was permitted to trail upon the ground, or it was trained upon poles (*pedamenta*), or upon square frames (*juga*), formed of poles or reeds, and from four to seven feet high. This mode of distributing the branches of the vine was the most expensive, but it was attended with the advantage of securing a more early and equal maturity of the fruit, than the other methods. The wine obtained from vines spread along the ground, though very abundant, was generally of inferior quality and bad flavour. In the provinces, the vines without props were preferred; but they were sometimes placed on single yokes, having their projecting branches tied to reeds that were fixed in the ground[h].

The ancients, however, remarking the tendency of the vine to shoot aloft, and distribute its branches to a great distance from the root, became impressed with the notion, that the most beneficial mode of training was to favour this natural disposition by attaching it to lofty trees; and they conceived, that the grapes thus grown were most likely to attain a full and equal maturity. The trees selected for the purpose were those which have single or contracted roots, such as the white poplar, or of which the foliage is not too much tufted, such as the elm, the black poplar, the ash, or the maple; but the elm was chiefly employed, because, in addition to its other recommendations, it is of easy growth, and the leaves furnish a grateful food for cattle. Trees thus appropriated were

[g] Geoponica, v. 11.

[h] *Vites canteriatæ et caracatæ.*—Colum. v. 4.

denominated *arbusta*, and considerable care was bestowed on the plantation and management of them. Their usual height was from thirty to forty feet, but in warm climates they were allowed to grow much higher; and, if we may credit FLORENTINUS, there were, in some parts of Bithynia, vines trained in this manner upon trees sixty feet high, which, far from experiencing any degeneracy, only produced so much the better wine[i]. It is, however, admitted, that it was only in very rich soils that such a practice was allowable; and that, in poor lands, it was advisable to form the trees into pollards, at the height of eight feet from the ground: and COLUMELLA assigns from eight to twelve feet as the usual height of such plantations in Gaul[k].

If we rely on the accounts which are given of the success attending this mode of training, we must believe, that it was not only the most convenient and the most productive, but that the wine obtained from grapes so raised was improved in quality, and was sweeter and more lasting than any other kind. CATO recommends, that the vine should be forced as high as possible,—"quam altissimam vineam facito;" PLINY even goes the length of asserting, that fine wines could only be grown in this manner,—"nobilia vina non nisi in arbustis gigni[l];" and COLUMELLA agrees with him in describing the produce of the loftiest trees as the best[m]. But, on the other hand, it is acknowledged by the natural historian, that this practice was unequivocally condemned by SASERNA, the father and son, both celebrated writers on husbandry; and that, although it was approved by SCROFA, yet he was disposed to limit its application to the vines of Italy: and, in describing the remarkable vines of his time, the same author gives an anecdote of CINEAS, the ambassador of PYRRHUS; who, on being shown the lofty elms on which the Arician vines grew, remarked, that it was no wonder the wine was so harsh, since its

[i] Geoponica, iv. 1.
[k] De Re Rustica, v. 7.
[l] Hist. Nat. xvii. 23.
[m] Lib. v. 6.

parent was hung on so high a gibbet,—"merito matrem ejus pendere in tam alta cruce[n]." When, therefore, we find, that such contradictory opinions prevailed with regard to the benefits of this plan of culture, and know, that it is completely at variance with the more approved practice of modern times, we may infer, that the advocates of the system were misled by their desire to obtain abundant crops, or by some accidental circumstances connected with the method in question; as, for instance, the freer exposure which would be afforded to the uppermost branches, and which would certainly promote the full ripening of the fruit.

The varieties of the vine known to the ancients were very numerous. COLUMELLA and PLINY mention about fifty sorts, some of which they describe with sufficient minuteness to enable us to appreciate the relation in which they stand to our modern vines. Since those authors compiled their account, indeed, not only the names have been, for the most part, altered, but the plants themselves have, in all probability, undergone a considerable change, from the effects of culture and transplantation; and we cannot expect to recognise every species which they enumerate. If the *gamet* grape of the Rhone is found to degenerate in a few years, when removed to the soil of Burgundy; and if the *maurillon* of the latter province acquires a new designation, and, perhaps, also new characters, when brought to Auvergne or Orleans, it would be absurd to imagine, that, after a lapse of two thousand years, we should be able to assign the exact place, in a modern botanical arrangement, to the varieties that adorned the Massic or Surrentine hills. Nevertheless, it is generally agreed to consider the *vitis præcox* of COLUMELLA as corresponding to the last mentioned modern variety; while the *vitis nomentana* is supposed to be the *traminer*, or *formentin rouge;* and the Corinthian grape appears to be identified with the *græcula*, which, we are told, was so small as not to be

[n] Lib. xiv. 1.

worth the pains of cultivation, except in a very rich soil. But we can hardly be mistaken with respect to the characters of the *vitis apiana*, which was so called from its liability to be attacked by bees, and which has now received the analogous appellation of *muscat*, or *moscadella*°. It was in high repute, as producing the most luscious and durable wine. The *bumasti*, *dactyli*, *duracinæ*, &c. may be easily distinguished among our modern growths. In the recent classification of the Andalusian vines, their names have been successfully appropriated to designate certain orders or genera.

Among these varieties of the vine, a strong predilection existed in favour of the Aminean, which is described as surpassing all others in the richness and flavour of the grape, and of which there were five sorts, distinguished by their botanical characters, and by their greater or less hardiness and fruitfulness. Next to them in excellence was ranked the Nomentan, or *rubellia*, which was still more prolific than the Aminean, but of which the fruit seems to have contained an excess of mucilaginous matter, as this variety was also known by the name of *fecinia*. The Eugenian, Helveolan, Spionian, and Biturican, and several others, were, in like manner, esteemed for their abundant produce, and the choice qualities of the wine which they yielded. That the ancients spared no pains or expense to procure all the best kinds for their vineyards, is proved by the accounts which they give of the effects of their transplantation: and that they confined their attention to such as were found to answer best with particular soils, may be inferred from the manner in which they describe certain spots as planted with a single species; as, for example, the hills of Sorrento and Vesuvius, which were covered with the small Aminean grape. There is, in fact, no part of the writings of the ancient agriculturists which is more deserving of being recalled to notice, than those passages in which they declaim against the bad effects of the promiscuous

° The "Vocabulario della Crusca" gives the etymon *moscado*, musk.

culture of many varieties of the vine, and recommend the husbandman to plant only such as are of good and approved quality. But, as all are not equally hardy, COLUMELLA thinks it may be well, in order to guard against a failure of the crop from unfavourable seasons, to keep three or four, or, at most, five sorts, which will be amply sufficient for the purpose. These he would dispose in separate divisions of the vineyard, so that the fruit of each may be kept apart, and gathered by itself when it ripens. In this way, he observes, the labour and expense of the vintage will be lessened; the mixture of ripe and unripe grapes will be, in a great measure, avoided; the genuine flavour of each sort will be preserved entire in the must, and improve in the wine, until it has reached its utmost perfection[p].

The system of management adopted by the ancients in preparing and dressing their vineyards, and their methods of pruning, grafting, and tending the vines, are marked by the same skill and discernment which characterize their other agricultural precepts: but a full description of these processes would lead into details, which, however interesting they might prove to the classical scholar or husbandman, would be foreign to the more immediate object of this work. Yet, before we quit the subject, it may be worth while to institute a brief inquiry into the comparative value and productiveness of ancient vineyards, concerning which we possess some very clear and satisfactory evidence.

According to VARRO, the fertility of the Roman vineyards must have been very great. "What necessary of life," he exclaims, in one of those animated passages which justify the high repute he acquired by his eloquence,—"What necessary of life can be named, which Italy does not furnish in abundance, and of most excellent quality? What corn shall I compare with that of the Campania; what wheat with that of Apulia; what wine with the Falernian;

[p] Lib. iii. c. 21.

what oil with the Venafran? Is not Italy so thickly planted with trees, that, altogether, it may be likened to a vast orchard? Can Phrygia, which HOMER distinguishes by the name of ἀμπελόεσσαν, be said to be more completely covered with vines, than this country? Or Argos, which the same poet calls πολύπυρον? In what other land does one *jugerum* yield ten, nay, fifteen *culei* of wine, as is the case in several districts of Italy? Does not MARCUS CATO record, in his work on the early history of our nation, that there was a certain piece of ground given to the people by CÆSAR, on this side of Ariminium, and beyond Picenum, which repeatedly afforded ten culei of wine from each jugerum? And, in like manner, in the neighbourhood of Faventia, does not the same quantity of land give three hundred *amphoræ* of must, whence the vines of that country are usually styled tricenary[q]?"—"Such," says COLUMELLA, in his comment on this passage, "was unquestionably the case in former times. But even now," he adds, "in the famed territory of Nomentum, and especially that portion of it which is illustrated by the residence of SENECA, a man equally conspicuous for his genius and his learning, eight culei are no uncommon produce for each jugerum. And the exuberance of our Spanish vineyards is still more astonishing, where, on the one hand, a single vine has been seen to bear upwards of two thousand bunches of grapes, and, on the other hand, seven culei of wine have been obtained from eighty stocks of only two years' growth[r]." The lowest estimate which the latter author makes of the produce of a vineyard is at the rate of one culeus to the jugerum; but when the vines come to give less than three culei, he thinks they ought to be extirpated, as no longer worth the expense of cultivation.

As the Roman *jugerum* was much less than our acre, being only 28,800 square feet, and the *culeus*, which consisted of 20 amphoræ,

[q] VARRO, De Re Rustica, i. 2. [r] COLUM. De Re Rustica, iii. 3.

is computed to have held about 135 English gallons[s], it follows, that the produce of a quantity of land equal to an English acre, according to the highest estimate of 300 amphoræ, or 15 culei, would amount to 3275 gallons, or upwards of 54½ hogsheads,—a quantity far above any thing that is derived from modern vineyards. But, from the manner in which COLUMELLA speaks of VARRO's report of these matters, we may perceive that he was inclined to regard it as exaggerated. If, on the other hand, we take his own experience of seven culei, (and it ought to be remarked, that he mentions even that number as somewhat extraordinary,) we must still consider the amount as very great. The vineyards of Champagne give five puncheons of 223 *litres* each, making about 290 gallons, to the *arpent*, or *demihectare*, which is one-fourth larger than the English acre; while those of the Côte d'Or afford only three puncheons, or 175 gallons: but in the southern provinces, for instance, in the Lyonnois, the arpent has been found to yield as much as 15 puncheons, or 870 gallons[t]. This, however, is little better than at the rate of three culei to the jugerum. In the kingdom of Granada,

[s] By ARBUTHNOT the *culeus* is reckoned equal to 143 gallons, 3 pints, and 11.095 cubic inches: by LANGWITH, in his Observations on the "Tables of Ancient Coins, &c." it is raised to nearly 147 gallons. The estimate of PAUCTON, on the other hand, fixing the *sextarius* at 0.6453 of the Paris pint, makes the amphora 7⅔ gallons, and the culeus 153⅓ gallons; while the calculations of ROMÉ DE L'ISLE reduce the amphora to 6¾ gallons, and consequently the culeus to 135 gallons. As the last mentioned author was at great pains to determine the exact size of the Roman foot, and the weight of the Roman pound; and as his tables have been, in some measure, sanctioned by KÆSTNER, who has added several corrections to the German translation by GROSSE, I have thought myself justified in giving the preference to his computations. With respect to the *jugerum*, it may be observed, that VARRO, COLUMELLA, PLINY, and QUINTILIAN, all agree in describing it as equal to two *actus* of 120 square Roman feet each; and COLUMELLA says expressly, that it contained 28,800 square feet. DR. KELLY, therefore, errs, when he states it at 5980 square yards, or 1 acre, 37½ perches.

[t] Traité sur la Culture de la Vigne, I. p. 102.

where the climate is still more propitious, and excels even that of Italy in warmth, vines that are uncommonly prolific will occasionally furnish from 26 to 36 *arrobas*, or 110 to 153 gallons, from each *marjale*, containing 250 plants[u]; which is at the rate of 923 to 1279 gallons to the English acre: but this is a very uncommon degree of fertility, and the average produce of the Granada vineyards falls considerably short of half that quantity. But in all these countries great attention is paid to the quality of the wine: if that consideration were abandoned, and quantity alone were sought for, undoubtedly more abundant crops might be procured. The ancients, as we have seen, were generally too intent on the latter object; allowing their vines to grow to a degree of luxuriance quite incompatible with the rules of good husbandry; and forcing them to bear, till in the end they became exhausted, or lost all their original excellence[x].

Seven jugera were thought to be as much as one vinedresser could properly manage. These might be purchased for 7000 *sestertii*, or £56. 10*s*. 2½*d*. English; and the expense of vines, stakes, and planting, would amount to 2000 sestertii for each jugerum. A good slave, to act as vinedresser, might be bought for 8000 sestertii more. Thus, the original outlay, in a vineyard of seven jugera, or 4⅜ acres, was 29,000 sestertii; to which must be added the interest, at six per cent, for the first two years that the vines did not bear; making, therefore, on the whole, 32,480 sestertii, or £262. 3*s*. 6*d*. According to this computation, a produce, not exceeding one culeus from the jugerum, which may be reckoned worth only 300 sestertii, the cheapest price, in COLUMELLA'S opinion, at which wine can well be sold, would afford a fair return, or upwards of six per cent for

[u] Ensayo sobre las Variedades de la Vid comun que vegetan en Andalucia. Madrid, 1807, p. 10.

[x] "Fructum vero plerique quam uberrimum præsentem consectantur, nec provident futuro tempori, sed quasi plane in diem vivant, sic imperant viribus, et eas ita multis palmitibus onerant, ut posteritati non consulant."—COLUM. iii. 3.

the money invested[y]. The estimate, however, is evidently made upon the lowest scale; and it is probable, that the profits derived from this branch of husbandry among the Romans, were, in general, much more considerable.

Let us compare, for a moment, the above calculations with the facts of which we are in possession concerning the value and productiveness of modern vineyards. In that part of Burgundy where the produce is nearly at the rate assumed by Columella, as in the neighbourhood of Dijon, the average price of vineyard-land is stated, by Mr. Arthur Young, at 1250 livres for the *journal* of 900 toises, or £63. 19*s*. 2*d*. for an English acre[z]; and the annual expenses of the cultivation for the arpent are computed by Rozier and Dussieux at 104 francs, to which must be added 10 francs for the interest on the money advanced, and 22 francs as an indemnity to the proprietor for contingencies. The medium price between the common and the fine wines being 150 francs for the *queue*, the three puncheons, or queue and a half, will therefore fetch 225 francs. Now, if from these proceeds we deduct the amount of the annual charges, we shall have remaining the sum of 89 francs, or about seven per cent, for the net profit[a]. In Champagne, again, the net proceeds of the common vineyards do not exceed 33 francs; but, on the few favoured spots where the finest wines are grown, they rise to upwards of 500 francs. In the latter case, however, we must take into account the corresponding increase in the price of the land, which, in the best situations, sells at from 3000 to 6000 francs the arpent.

[y] Colum. iii. 3. [z] Travels in France, vol. II. p. 16.
[a] Traité sur la Culture de la Vigne, I. p. 107.

CHAPTER II.

OF THE MANAGEMENT OF THE VINTAGE, AND THE PROCESSES USED BY THE ANCIENTS IN THE PREPARATION OF THEIR WINES.

IN warm and low situations the vintage of the ancients began towards the end of September, but, in most places, it was deferred till the following month. When the tendrils of the vine were observed to fall loose upon the stalks; when, on pulling a grape from the bunch, the void showed no tendency to fill up; and when the stones had acquired a brown or blackish colour, the fruit was deemed sufficiently ripe for gathering. As nothing is more prejudicial to the quality of the wine than the mixture of unripe with ripe grapes, it was usual to begin with those parts of the vineyards where they had attained their fullest maturity, and with the early and black kinds in the first instance. It was deemed improper to pull them when they were parched by the sun, or while they were covered with dew. Those first collected were thought to yield the largest quantity of must; but the second gathering gave the best wine; the third, the sweetest. In some countries, as in Bithynia and Narbonne, it was the custom to twist the stalks of the grapes, and to strip the leaves around them, leaving them thus exposed to the full force of the sun's rays, for a period of thirty days previous to the vintage: in other places, in order to obtain a richer wine, the grapes, after they were gathered, were spread on crates, to dry for three or four days in the sun[a].

[a] See PLIN. Hist. Nat. xviii. 31; PALLAD. de Re Rustica, x. 11; VARR. i. 54; Geoponica, vii. 18; COLUM. xii. 29.

In making the common wines, the grapes, as soon as collected, were conveyed in baskets (*corbes*, or *fiscinæ*,) to the cellar, or press-room (*torcularium*), where they were first trodden, and afterwards subjected to the action of the press; the juice that issued being allowed to flow into the vat, or cistern (*lacus*), which was generally of mason-work, lined with plaster, and sunk in the ground. That the ancients were fully aware how much the quality of the wine is influenced by the expedition with which these operations are performed, appears from the direction given by PLINY, namely, to press at once as much as would fill twenty culei; for which purpose he conceives, that one press and one vat were amply sufficient, where the size of the vineyard did not exceed twenty jugera. When the juice had ceased to flow from the press, some were in the practice of cutting the edges of the cake, and obtaining, by a fresh pressure, a secondary wine, which they called *vinum tortivum*, or *circumcisitum* (*vin de taille*), and which was kept apart, as it was apt to have an irony taste: the pressed skins were then thrown into casks, and, being fermented with a quantity of water, furnished an inferior liquor, called by the Greeks δευτέριος, or ϑάμνα, and by the Romans *lora* (*quod lota acina*), which served as a beverage for the labourers in winter; whence it was sometimes also called *vinum operarium*[b].

At first the *torcular*, or wine-press, appears to have been of a very simple construction, consisting of little more than an upright frame, in which was fixed a long beam, or lever (*prelum*), commonly loaded with stones to give it greater weight, and having thongs and ropes attached to the handle, by which it could be more easily worked[c]. Another simple mode of pressing the grapes, if we may confide in the authority of an ancient painting, was by placing them in

[b] CATO de Re Rustica, XXV. VARR. loc. cit.

[c] The representation of a rude wine-press, as exhibited on an antique bas-relief found among the ruins of HADRIAN'S villa, has been given by PIRANESI, in No. 55 of his "Vasi, Candelabri, &c."

a trough fixed in the bottom of an upright square frame, in which were three cross-beams moving in grooves, and having a row of conical wedges between each beam, which could be driven in by mallets[d]. When the mechanical powers became better understood, the screw and windlass were introduced, by which means a more steady and vigorous pressure was supplied; and subsequent inventions gave a more convenient form to the rude and cumbersome apparatus of early times[e].

For the ordinary wines, the fermentation was suffered to continue till it worked itself out, or, according to PLINY, for about nine days: and, as the mass was so considerable, it is evident, that the process would go on with rapidity, and that a great portion of the aroma and alcohol of the wine would be dissipated before the operation was terminated; especially when the grapes did not abound in saccharine matter. In order to obviate this fault, various methods were contrived for preserving the virtues of the must unimpaired, and for procuring from it a richer and more durable wine, of which the authors so often referred to have transmitted very copious details.

In the first place, the juice that flowed from the gentle pressure of the grapes upon one another, as they were heaped in the baskets or troughs, previously to their being trodden, was carefully collected in the vessels in which it was intended to be preserved, and set aside till the following summer, when it was exposed during forty days to the strongest heat of the sun[f]. As it was procured from the

[d] Pitture d'Ercolano, Tom. I. p. 187. See the Vignette prefixed to the preceding chapter.

[e] "Antiqui funibus vittisque loreis ea [sc. torcularia] detrahebant et vectibus. Intra centum annos inventa Græcanica, mali rugis per cochleas bullantibus, palis affixa arbori stella, a palis arcas lapidem attollente secum arbore; quod maxime probatur. Intra viginti duos hos annos inventum, parvis prelis, et minori torculari, ædificio breviore, et malo in medio decreto, tympana imposita vinaceis, superne toto pondere urgere, et super prela construere congeriem."—PLIN. Hist. Nat. xviii. 31.

[f] PLIN. Hist. Nat. xiv. 9.

most luscious grapes, and kept from the contact of the external air, the fermentation which it underwent would be very slight, and it would retain in perfection the full flavour of the fruit. To this liquor, which appears to have been first made at Mitylene, in the island of Lesbos[g], and which was in very high estimation, the ancients gave the several names of πρόχυμα, πρόδρομος, or πρότροπος, *mustum sponte defluens, antequam calcentur uvæ.*

Sometimes, however, when the quantity of juice thus obtained was either too small, or not sufficiently saccharine, to enable it to keep without further preparation, the must that collected in the vat, before the grapes were subjected to the press (*mustum lixivium*), was put into an amphora, which was properly coated and secured by a well-pitched cork, and then sunk in a pond, where it was allowed to remain about a month, or till after the winter solstice. When taken up, it was commonly found to have lost all tendency to ferment, and might be preserved unchanged during a whole year, or more[h]. In this state it was considered as something between a syrup and a wine; and was termed by the Greeks ἀειγλεύκης, h. e. *semper mustum.* When, instead of being placed in a fresh-water pond, the vessel was plunged in the sea, the liquor was thought to acquire very speedily the flavour of age,—"quo genere præcox fit vetustas;" and the wine so obtained was denominated θαλασσίτης. To this practice the oracle given to the fishermen, desiring them to dip BACCHUS in the sea, may be supposed to allude[i].

The preparation of the *passum*, or wine from half-dried grapes, varied in different places. The grapes selected were chiefly of the

[g] ATHEN. Deipnosoph. i. 23.

[h] "Antequam prelo vinacea subjiciantur, de lacu quam recentissimum addito mustum in amphoram novam, eamque oblinito, et impicato diligenter, ne quicquam aquæ introire possit. Tunc in piscinam frigidæ et dulcis aquæ totam amphoram mergito, ita ne qua pars extet. Deinde post dies quadraginta eximito. Sic usque in annum dulce permanebit."—COLUM. xii. 29. See also CATO, c. 120.

[i] PLUTARCH, Quæst. Natur. 27, (Op. Ed. Reiske, ix. p. 620.)

apian, or muscat kind, and were allowed to remain on the vine until they had shrunk to nearly one-half their original bulk; or else they were gathered when fully ripe, and, being carefully picked, were hung to dry in the sun, upon poles or mats, six or seven feet from the ground; care being taken to protect them from the nightly dew: but some preferred the expedient of immersing them in boiling oil. After they had been thus treated, they were freed from the stalks, and introduced into a barrel, and a quantity of the best must, sufficient to cover the whole, was thrown over them. In this they were allowed to soak five or six days; at the expiration of which they were taken out, put into a frail, and submitted to the operation of the press. This was the choicest sort of *passum:* an inferior kind was obtained by adding rain water, that had been previously boiled, instead of must; the other parts of the process remaining the same. When the apian grapes were used, they were first trodden in the cask, with a sprinkling of wine to each layer, as it was thrown in; and, after five days, were again trodden, before they were squeezed. When the fermentation ceased, the liquor was decanted into clean vessels, to be stored for use.

On other occasions, when the juice of the grapes was deemed too thin and watery for the production of a good wine, as was almost always the case in rainy seasons, it was boiled down to a greater consistence, and a small portion of gypsum was added to it. The Lacedemonians, we are told by Democritus, were in the practice of reducing it one-fifth part, and keeping it four years before it was drunk; others were satisfied with the evaporation of a twentieth part of the bulk[k]. Sometimes, however, the inspissation was carried much farther, and the boiling prolonged till one-third, one-half, or even two-thirds of the liquor, were evaporated. The place where this operation was performed was called the *defrutarium.* When the must was inspissated to one-half, it acquired the name of *defrutum;*

[k] Geoponica, vii. 4.

when two-thirds were left, the liquor was denominated *carenum;* and, when reduced to one-third, it received the appellation of *sapa* among the Romans, and σίραιον and ἕψημα among the Greeks: but the proportions are not always stated in the same manner, and were no doubt regulated, in some degree, by the original quality of the must[l]. The last-mentioned liquor, when obtained from rich grapes, appears to have been drunk as a wine, and may be regarded as corresponding to the boiled wines of the moderns; but the two former were chiefly employed for correcting weak must, and for preparing various condiments, which were resorted to for the purpose of heightening the flavours of the ancient wines. They were, in fact, identical with the *sabe*, or *raisiné*, of the French, and the *sapa* of the Italians, which are still used for culinary purposes, and which are made according to the same rules[m].

Accident is said to have led to the discovery of another method of preparing the must. A slave, who had stolen part of the contents of a cask, adopted the expedient of filling-up the deficiency with sea-water, which, on examination, was thought to have improved the flavour of the liquor; and thenceforth the practice of adding salt-water to certain wines became very common among the Greeks. For this purpose the water was directed to be taken up as far as possible from the shore, and in a calm and clear day, in order that it might be had of the requisite strength and purity; and to be boiled down to about a third part, before it was added to the wine. COLUMELLA mentions, that his uncle was in the habit of first keeping it six years, and then evaporating it for use; and that of the liquor so prepared a sextarius was sufficient for an amphora, being in the proportion of about a pint to little more

[l] COLUM. xii. 19; PALLAD. xi. 18; DIOSCOR. v. 9.

[m] "Aujourd'hui," says OLIVIER DE SERRES, "nous appelons *sabe* le moust, qui par bouillir se consume de la moitié; duquel nous nous servons seulement pour faire des sauces en l'appareil des viandes."—Théâtre d'Agriculture, (Ed. 1814), Tom. I. p. 297.

than six gallons. "Some persons," he adds, "throw in as much as two, or even three sextarii; and I should not hesitate to do so also, if the wine were strong enough to bear this admixture, without betraying a saline taste[n]," — of which, it must be acknowledged, there was no small risk. Nevertheless, several of the Greek sweet wines were manufactured in this manner; and CATO has left us particular receipts for imitating them, in which the allowance of sea-water, or salt, is always a conspicuous ingredient[o]. "Hoc vinum," he assures us, when speaking of one of these artificial compounds, "non erit deterius, quam Coum." Whatever the comparative merits of the Coan wine may have been, there is reason to suspect, that the taste of the Censor was not very refined, and that the liquor which he thus extols could never have become very grateful; even although it was allowed to ripen four years in the sun: but it may have been equally palatable as the manufactured trash which, in this country, we are often condemned to swallow, under the names of the finest wines. When HORACE describes the Chian wine, at the supper of NASIDIENUS, as being "maris expers[p]," he has been generally supposed to allude to its being of inferior quality, from the want of salt water; whereas he probably meant to insinuate, that it had never travelled on the sea, but was a factitious or home-made wine. For the more delicate wines, such as the ἀνθοσμίας, the proportion of sea-water was only one-fiftieth part[q].

These were all the more simple preparations of the must, which appear to have been adopted with the view of rendering it more durable: but, as several of the methods in question, instead of tending to preserve the vinous qualities of the liquor, were rather calculated to injure and destroy them, other means were devised for restoring to it a due degree of flavour and aroma. Considering

[n] De Re Rustica, xii. 21.
[o] Cap. 24, 105.
[p] Sermon. II. viii. 15.
[q] ATHENÆUS, i. 24.

the attention that was bestowed on the evaporation of the must, and the extensive scale on which the process was conducted, it is somewhat extraordinary that the ancients should have continued in ignorance of the art of separating the alcohol from the other component parts of the wine; the more especially as they had occasionally remarked the inflammability of the latter fluid: but, as no hint occurs in their writings, from which it can be inferred that they had the most distant idea of any such operation, it is clear, there could be no question of strengthening their liquors, according to the modern fashion, by the admixture, namely, of a greater or less portion of ardent spirit. They were, therefore, obliged to resort to such substances as, from their fragrant odour and agreeable pungency, were most likely to impart the desired properties,—"ut odor vino contingat, et saporis quædam acumina." For this purpose, it was not unusual to sprinkle a quantity of pounded pitch or rosin on the must, during the first fermentation; or, after it was completed, to infuse the flowers of the vine, the leaves of the pine or cypress, bruised myrtle berries, the shavings of cedar-wood, southernwood, bitter almonds, and numberless other articles of a similar nature[r]: but a more common mode of proceeding seems to have been, to mix these ingredients, in the first instance, with the *defrutum*, or inspissated must, and boil the whole to a thick consistence, and then to add a small portion of the confection to a certain quantity of the new wine. When we peruse the receipts for this decoction which Columella has delivered, we cannot but be struck with the large proportions and potency of the substances employed. To ninety amphoræ of must, for example, which had been evaporated to a third, ten sextarii of liquid Nemeturican pitch, or tar, washed in boiled sea-water, and a pound and a half of turpentine resin, are directed to be added; and, the liquor being again reduced two-thirds, six pounds of crude pitch, in powder,

[r] Geoponica, vii. 12, 20.

are to be gradually mixed with it, together with a liberal allowance of various aromatic herbs, such as spikenard, fleur-de-lis, myrrh, cardamoms, saffron, melilot, cassia, sweet-scented flag, &c. all well bruised and sifted. Of this farrago, COLUMELLA informs us, that he usually allotted four ounces to two amphoræ, or thirteen and a half gallons, when the vintage was watery; but, in dry seasons, three ounces sufficed: and he prudently cautions the wine-dealer not to make the artificial savour too palpable, lest his customers should be deterred by it from purchasing the wine[s]. It was only for the inferior wines, however, that such medicaments were used; for, as the same author, in a preceding chapter, justly remarks, "that wine, which is capable of being preserved for years without any condiment, must be reckoned the best; and nothing ought to be mixed with it by which its genuine flavour may be corrupted and disguised: whatever pleases by its natural qualities, is to be deemed the most choice[t]."

Many of the articles which enter into the above-mentioned formulæ, being of an insoluble nature, would be gradually precipitated, and may be considered as operating chiefly in the way of finings. In fact, several of them seem to have been adopted with this intention, and would, doubtless, often answer the twofold purpose of perfuming and clarifying the wine. But, as the disorder of acescence would be apt to occur in all those cases where the fermentation had been allowed to exhaust itself, it became necessary to resort to more effectual means for checking this tendency, and giving to the wines a proper degree of durability. With that view, milk, chalk, pounded shells, toasted salt, or gypsum, were employed by some persons; others used lighted torches, or hot irons, which they extinguished in the wine; and others, again, recommended the ashes of the vine-stalks, roasted gall-nuts or cedar-cones, burnt acorns or olive-kernels, sweet almonds, and a variety of similar

[s] De Re Rustica, xii. 20. [t] Ibid. xii. 19.

substances, which were generally introduced into the wine after the first fermentation was finished[u]. Whether the ancients were acquainted with the operation of sulphuring, is uncertain. PLINY, indeed, mentions sulphur as one of the articles used by CATO to fine his wines,—"vina concinnari;" but, as that part of his works in which he describes its employment is lost, we have no means of determining whether he applied it in a solid form, or in the state of vapour. In one place, it is true, he directs a pitched tile, with a live coal and various aromatics, to be suspended in the cask, previously to the introduction of the wine; but this was chiefly with the design of imparting an agreeable perfume, and with no view to the clarifying of the liquor[x]. A similar receipt is given by him, for removing any unpleasant odour that the wine may have contracted. The practice of fining with the whites of eggs seems to have been common, as both PALLADIUS and FRONTO give directions for it[y]: and the passage of HORACE, in which he alludes to the mending of Surrentine wine with the lees of Falernian, shows that the yolks of pigeons' eggs were also used for the same purpose; unless, as there is some reason to suspect, the poet has mistaken the yolk for the white:—

> "Surrentina vafer qui miscet fæce Falerna
> Vina, columbino limum bene colligit ovo;
> Quatenus ima petit volvens aliena vitellus."—Sermon. II. iv. 55.

[u] See Geoponica, vii. 12.

[x] "Ut vinum bene odoratum sit, sumito testam picatam. Eo prunam lenem indito; suffito serta, et schœno, et palma quam habent unguentarii; ponito in dolio, et operito, ne odor exeat, antequam vinum indas."—De Re Rustica, c. 113.

[y] Geoponica, vii. 22.

CHAPTER III.

OF THE WINE VESSELS AND WINE CELLARS OF THE ANCIENTS.

WHEN the fermentation in the vat had ceased, the wine was introduced into those vessels in which it was destined to remain for use, or until it had undergone certain changes which rendered a subsequent transfusion advisable. As it was commonly in this stage that the medicaments described in the preceding chapter were added, a considerable degree of secondary fermentation would necessarily take place; and this effect would be still further increased by the preparations which were applied to the inside of the vessels, and which were resorted to with the same view, and consisted of much the same substances, as the condiments used for mingling with the wine. When the wine was put into a cask, care was taken not to fill it too full, but to allow sufficient space for the froth or scum which would be thrown up, and which is directed to be diligently removed by ladles, or with the hand, during the first five days[a]. It was also deemed of importance to cleanse the cellar or press-room from all putrid and acescent substances, and to keep up an agreeable odour in them by means of fumigations.

The most ancient receptacles for wine were probably the skins of animals (ἀσκοὶ, *utres*), rendered impervious by oil or resinous gums. When Ulysses proceeded to the cave of the Cyclops, he is described as carrying with him a goat-skin, filled with the rich

[a] Geoponica, vi. 12.

black wine which he received from MARON, the priest of APOLLO[b]. In the celebrated festal procession of PTOLEMY PHILADELPHUS, there is said to have been a car, twenty-five cubits in length, and fourteen in breadth, in which was borne an *uter* made of panthers' hides, and containing three thousand amphoræ of wine, which was allowed to flow from it slowly, as it was dragged along[c]: but, unless this enormous wine-skin had been protected by some solid casing, it could not have resisted the lateral pressure of such a body of liquor. As the arts improved, vessels of clay were introduced; and the method of glazing them being unknown, or, at least, not used for this purpose, a coating of pitch was applied, in order to prevent the exudation of the liquor. In some places where wood abounded, as in the neighbourhood of the Alps and in Illyria, wine casks were made of that material; but the vessels in general use among the Greeks and Romans were of earthen-ware; and great nicety was shown in choosing for their construction such clay as was least porous, and bore the action of the furnace best. But it was only the smaller sort that could be made on the wheel: the larger were formed on the ground, in stoves, where a sufficient degree of heat for baking them could be applied[d]. They had, for the most part, a bulging shape, with a wide mouth; and the lips were turned out in such a way as to prevent the ashes or pitch, with which they were smeared, from falling in, when the cover was removed. When new, these vessels received their coating immediately on being taken out of the furnace. As such of them as were of any considerable size were liable to rents and other accidents, it was customary to bind them with leaden or oaken hoops, in order to preserve them entire[e]. PANCIROLLUS affirms, that they were

[b] Odyss. ix. 195.

[c] ATHENÆUS, v. 7.

[d] Τοὺς μέντοι μείζους χαμαὶ κειμένους ὀσημέραι ἐν θερμῳ οἰκήματι ἐποικοδομοῦσι, καὶ μεγάλους ποιοῦσιν.—Geoponica, vi. 3.

[e] Dolia plumbo vincito, vel materie quercina.—CATO, c. 39.

occasionally capacious enough to hold a waggon-load of wine, or one hundred and twenty amphoræ[f]; but this is hardly credible. That they were often very large, however, is certain; for we read of *dolia sesquiculearia*, or tuns which held a culeus and a half, or three hogsheads and one-third. The *culearia* appear to have been the vessels in which the ordinary wines were commonly sold.

As the Greeks gave the preference to small vessels for the preservation of their wines, we may infer, that their casks (πίθοι) were of more moderate capacity. Their largest wine measure was the μετρητὴς, containing eight gallons six pints and a quarter; and the κάδος, κεράμιον, and ἀμφορεὺς[g], were earthenware vases which held about that quantity. The *quadrantal*, or cube of the Roman foot, on the other hand, was equivalent to forty-eight *sextarii*, or twenty-seven English quarts: and the *testa*, *cadus*, *diota*, and *amphora*, of the Romans, were, for the most part, of that measure. The *urna* was equal to half an amphora. The last-mentioned vessel was generally of an elegant form, with a narrow neck, to which the two handles were attached, and the body tapering towards the bottom; by which means it could be fixed with little trouble in the ground, and the sediment which was deposited by the wine would not be easily disturbed by the process of decanting. Those made at Cnidos and Athens, but particularly the latter place, were most esteemed: whence the representation of an amphora upon certain of the Attic coins. Sometimes the name of the maker, or of the place where they were manufactured, was stamped upon the neck.

Occasionally these vessels received a lining of plaster, which was thought to diminish the roughness of the wine; but the more common preparation, as has been already hinted, was with pitch,

[f] Rerum Memorabilium, I. 138.

[g] By syncope, from ἀμφιφορεὺς, so called from the two handles attached to the neck, by which it was carried. The διώτη had its name from a similar circumstance.

mastic, oil, and various aromatic substances; and, as the quality of the wine depended on the due seasoning, great care was taken to have them in proper order for the vintage. In some of the receipts for the process in question, wax is recommended as a useful addition to the other ingredients, especially if a dry wine was desired: but PLINY and other writers condemn its use, as tending to cause acescency[h]. Before the wine was introduced, the casks, or, at least, the orifices, and covers, were usually smeared with a composition of much the same nature as the condiments above described. When the vessels were filled, and the disturbance of the liquor had subsided, the covers, or stoppers, were secured with plaster, or a coating of pitch mixed with the ashes of the vine, so as to exclude all communication with the external air.

The casks containing the stronger wines were placed in the open air, or in sheds where they could receive the benefit of the sun's rays[i]: but, in general, they were ranged along the walls of the wine cellar, and sunk to a greater or less depth in sand. In this situation they were allowed to remain till the wine was judged to have acquired a sufficient maturity; or, after it had undergone a proper clarification, the contents were transferred to smaller vessels. In what manner they were emptied, is not very clear. The phrases descriptive of the operation would, indeed, imply, that the Romans had no other mode of racking their wines[k], than by inclining the cask to one side, and thus pouring out the liquor: but such a method must have been attended with great trouble and inconvenience, especially in those cases where the vessels had been fixed in the ground; and as many of them remained stationary, it may

[h] Geoponica, vi. 5, 6; PLIN. Hist. Nat. xiv. 20.

[i] "Campaniæ nobilissima exposita sub dio cadis verberari sole, luna, imbre, ventis, aptissimum videtur."—PLIN. Hist. Nat. xiv. 21.

[k] "Non ante verso lene merum cado."—HORAT. Carm. iii. 29.

"Invertunt Aliphanis vinaria tota."—Serm. II. viii. 29.

be presumed, that they must have had other contrivances for discharging the contents. The syphon, used by the Greeks and Romans for tasting their wines, appears to have been merely a tube open at both ends, like the instrument still employed for that purpose, by which a portion of wine may be drawn, by suction, from any part of the cask: but, if the same term also denoted a fire engine, by which water might be forced to considerable height[l], we may fairly conclude, that the use of the piston was occasionally resorted to, for the purpose of emptying the larger tuns.

For the wine cellar (*cella vinaria*), the writers on rural economy generally advise a northern aspect, and one not much exposed to the light, in order that it may not be liable to sudden vicissitudes of temperature; and they very properly inculcate the necessity of placing it at a distance from the furnaces, baths, cisterns, or springs of water, stables, dunghills, and every sort of moisture and effluvia likely to affect the wine. Pancirollus is of opinion, that the ancients were not in the practice of having repositories for wine under ground, like our modern cellars[m]; and, unquestionably, there is no direct evidence in their works of the existence of those "extended vaults of different dimensions," which Barry has figured to himself: but, as they were so careful to secure the benefit of a cool and equable atmosphere for their wines, we can hardly suppose, that they would overlook the advantages to be derived from this mode of building. The directions given by Palladius for the construction of a wine cellar show, that it was, at least in part, excavated; for he recommends, that it should be three or four steps below the level of the *calcatorium*, or place where the grapes were trodden, so that the liquor that collected in the vats could be drawn off into the casks, as they stood ranged against

[l] See Hesychius, in voce Σίφων—Beckmann's Geschichte der Erfindungen, IV. Bd. p. 430.

[m] Rer. Memorab. I. ii. 8.

the walls, by means of conduits, or earthen tubes[n]. When the quantity of wine made was greater than the casks could conveniently hold, a row of tuns (*cupæ*) was disposed along the middle of the floor, on raised stands, so as to leave a free passage between them and the casks; or, if these were buried in the ground, with a gangway over them.

In these cellars, which may be considered as analogous to the *celliers* of the French, the lighter wines, or such as lasted only from one vintage to another, were kept: but the stronger and more durable kinds were transferred to another apartment, which, by the Greeks, was called ἀποθήκη, or πιθὼν, and which, among the Romans, was generally placed above the *fumarium*, or drying kiln, in order that the vessels might be exposed to such a degree of smoke as was calculated to bring the wines to an early maturity[o]. This, however, was an invention of the latter ages. When Telemachus goes to draw the necessary supply of wine for his voyage, he is represented as descending to his father's lofty chamber (ὑψόροφον θάλαμον εὐρὺν), which seems to have been a sort of treasury, or store-room, where, with jars of fragrant oil, and chests containing gold, and brass, and raiment,—

> "Many a cask, with seasoned nectar filled,
> The grape's pure juice divine, beside the wall
> Stood waiting, orderly arranged[p];"

[n] "Basilicæ ipsius forma, calcatorium loco habeat altiore constructum; ad quod inter duos lacus, qui ad excipienda vina hinc inde depressi sint, gradibus tribus ferè aut quatuor ascendatur. Ex his lacubus canales structi, vel tubi fictiles circa extremos parietes currant, et subjectis lateri suo doliis per vicinos meatus manantia vina defundant."—De Re Rustica, i. 18.

[o] "Apothecæ rectè superponentur his locis, unde plerumque fumus (balnearum) exoritur, quoniam vina celerius veterascunt, quæ fumi quodam tenore præcocem maturitatem trahunt."—Colum. i. 6.

[p] Ἐν δὲ πίθοι οἴνοιο παλαιοῦ ἡδυπότοιο
ἕστασαν ἄκρητον, θεῖον ποτὸν, ἐντὸς ἔχον ἔχοντες
ἐξείης ποτὶ τοῖχον ἀρήροτες.—Odyss. ii. 340.

and he desires the nurse to fill him twelve amphoræ with the wine next in richness to that which was reserved for his sire's return, and to adapt fit stoppers to the whole[q]. From this account it is manifest, that, in the earliest times, there was no separate repository for wines; but that it was kept in large vessels, and in a low apartment, along with other articles of value, and was drawn off into amphoræ, as it was wanted for use.

From some allusions of the classics[r] it has been contended, that the ancients were fully aware of the advantages of having both outer and inner cellars, and that they devoted the latter to the reception of their more valuable wines. Assuredly, if their repositories, as HORACE insinuates, were capable of containing a thousand amphoræ at a time[s], we may easily conceive, that they might have been divided into different cells, and that the innermost would be reserved for the best vintages. But, in the passage above referred to, the phrase "interiore nota" may merely imply, that the wine in question came from the remotest end of the cellar, and was therefore the oldest and choicest, or that it was part of the stock which had been put aside for festal occasions. The "hundred keys" of the cellars in which the precious Cecuban vintages are said to have been stored, can be considered only as a poetical amplification.

Previously, however, to depositing the amphoræ in the apotheca, it was usual to put upon them a label, or mark, indicative of the vintages, and of the names of the consuls in authority at the time, in order that, when they were taken out, their age and growth

[q] Δώδεκα δ' ἔμπλησον, καὶ πώμασιν ἄρσον ἅπαντας. — Odyss. ii. 353.

[r] "Seu te in remoto gramine per dies
Festos reclinatum bearis
Interiore nota Falerni." — HOR. Carm. ii. 3.

[s] "Si positis intus Chii veterisque Falerni
Mille cadis." — Satir. ii. 3.

might be easily recognised[t]. With the luxurious Romans this became a point of great importance; so that, to particularize a choice sample, it was sufficient to mention the year in which it was placed in the cellar, as is abundantly proved by numerous passages of their poets; and the term *nota* was very commonly employed in reference to the quality of the liquor, as in the line of HORACE above cited. PLINY affirms, that this mode of designating wines originated from the frequent adulterations that were practised in the manufacture, so that they could only be distinguished by the cellar marks[u]. Sometimes these marks were obliterated by the smoke to which the vessels had been exposed, as JUVENAL alleges to have been the case with regard to some very old Setine wine[x]: and the custom of placing implicit faith in such a criterion must have given birth to numberless impositions, as nothing could be more easy than to substitute one consul's name for another, or to give the semblance of age to a new label.

The application of the *fumarium* to the mellowing of wines was borrowed from the Asiatics, who were in the habit of exposing their wines to the heat of the sun on the tops of their houses, and

[t] Among the amphoræ lately found on the site of the ancient Leptis, and now deposited in the British Museum, is one with the following inscription in vermillion:—

L. CASSIO
C. MARIO
COS.

It had, consequently, been filled with the vintage of the year 647 A. U. C. when LUCIUS CASSIUS LONGINUS and CAIUS MARIUS NEPOS were Consuls; and when MARIUS himself was contending with JUGURTHA for the possession of the adjacent province.

[u] "Eo venere mores, ut nomina modo cellarum veneant, statimque in lacubus vindemiæ adulterentur."—Hist. Nat. xxiii. 1.

[x] ——— "Cujus patriam titulumque senectus
Delevit multa veteris fuligine testæ."—Sat. v. 34.

afterwards placing them in apartments warmed from below, in order that they might be more speedily rendered fit for use[y]. As the flues, by which the ancient dwellings were heated, were probably made to open into the apotheca, it is obvious, that a tolerably steady temperature could be easily supplied, and that the vessels would be fully exposed to the action of the smoke. Although the tendency of this procedure may, according to our modern notions, appear very questionable; yet, when attentively considered, it does not seem to differ much from that of the more recent method of mellowing Madeira, and other strong wines, by placing them in a hot-house, or in the vicinity of a kitchen fire or baker's oven, which is found to assist the development of their flavour, and to bring them to an early maturity. As the earthen vases, in which the ancient wines were preserved, were defended by an ample coating of pitch or plaster, it is not likely that the smoke could penetrate, so as to alloy and vitiate the genuine taste and odour of the liquor; but the warmth which was kept up by its means would have the effect of softening the harshness of the stronger wines, and, probably, of dissipating, to a certain extent, the potent aroma of the condiments with which they were impregnated. Although TIBULLUS gives the epithet "smoky" to the Falernian wines thus prepared[z], and HORACE speaks of the amphora with which he proposed to celebrate the calends of March, as having been laid up "to imbibe the smoke," during the consulship of TULLUS[a], they are not to be understood as alluding to the flavour of the liquor, but merely to the process

[y] GALEN. Simpl. iv. 14.

[z] "Nunc mihi fumosos veteris proferte Falernos
Consulis, et Chio solvite vincla cado."—Eleg. ii. 1.

[a] "Hic dies anno redeunte festus
Corticem adstrictum pice dimovebit
Amphoræ fumum bibere institutæ
Consule Tullo."—Carm. III. viii. 9.

by which it was brought to a high degree of mellowness. The description of Ovid, however, may be considered as more correct; for he applies the term only to the cask in which the wine was enclosed[b]. At the same time, it must be acknowledged, that the practice in question was liable to great abuse; and we may readily conceive, that, from the success attending the experiment as applied to the first-rate growths, it might happen, that many inferior wines, though not at all adapted for the operation, would, nevertheless, be made to undergo it, in the vain hope of bettering their condition; that, from an anxiety to accelerate the process, the wines would be sometimes exposed to a destructive heat; or that, from inattention to the corking of the vessels, the smoke might enter them, and impart a repulsive savour to the contents. As these forced wines were in great request at Rome and in the provinces, the dealers would often be tempted to send indifferent specimens into the market: and it is not, perhaps, without reason, that Martial inveighs so bitterly against the produce of the *fumaria* of Marseilles, particularly those of one Munna, who seems to have been a notorious offender in this line, and whom the poet humorously supposes to have abstained from revisiting Rome, lest he should be compelled to drink his own wines[c].

One certain consequence of the long exposure of the amphoræ to the influence of the fumarium must have been, that a portion of the contents would exhale, and that the residue would acquire

[b] "Quæque puer quondam primis diffuderat annis,
Prodit fumoso condita vina cado."—Fast. v. 517.

[c] "Improba Massiliæ quicquid fumaria cogunt,
Accipit ætatem quisquis ab igne cadus,
A te, Munna, venit; miseris tu mittis amicis,
Per freta, per longam toxica sæva viam:
Nec facili pretio, sed quo contenta Falerni
Testa sit, aut cellis Setia cara suis.
Non venias quare tam longo tempore Romam,
Hæc puto caussa tibi est—ne tua vina bibas."—Epig. x. 36.

a greater or less degree of consistence; for, however well the vases might have been coated and lined, or however carefully they might have been closed, yet, from the nature of the materials employed in their composition, from the action of the vinous fluid from within, and the effect of the smoke and heat from without, it was quite impossible that some degree of exudation should not take place. As the more volatile parts of the must were often evaporated by boiling, and as various solid or viscid ingredients were added to the wine previously to its introduction into the amphoræ, it is manifest, that a further exhalation must have reduced it to the state of a syrup or extract. In the case of the finer wines, it is true, this effect would be, in some measure, counteracted by the influence of the insensible fermentation; and a large proportion of the original extractive matter, as well as of the heterogeneous substances suspended with it, would be precipitated on the sides and bottom of the vessels, in the form of lees: but, in other instances, the process of inspissation would go on, without much abatement from this cause. Hence it comes, that so many of the ancient wines have been described as thick and fat; and that they were not deemed ripe for use, until they had acquired an oily smoothness from age[d]. Hence, too, the practice of employing strainers (*cola vinaria*) to clarify them, and free them from their dregs. In fact, they often became consolidated to such a degree, that they could no longer be poured from the vessels, and it was necessary to dissolve them in hot water, before they could be drunk. We learn from ARISTOTLE, that some of the stronger wines, such as the Arcadian, were reduced to a concrete mass, when exposed in skins to the action of smoke[e]: and the wine-vases, discovered

[d] "Nec Læstrygonia Bacchus in amphora
Languescit mihi."—HOR. Carm. III. xvi. 34.

"Descende, Corvino jubente,
Promere languidiora vina."—Ibid. xxi. 6.

[e] Meteorolog. iv. 10.

among the ruins of Herculaneum and Pompeii, have generally been found to contain a quantity of earthy matter. It is clear, then, that those wines which were designed for long keeping could not have been subjected to the highest temperature of the fumarium, without being almost always reduced to an extract. Indeed, COLUMELLA warns the operator that such might be the issue of the process, and recommends that there should be a loft above the apotheca, into which the wines could be removed,—"ne rursus nimia suffitione *medicata* sint."

For the more precious wines, the ancients occasionally employed vessels of glass. The bottles, vases, cups, and other articles of that material, which are to be seen in every collection of antiquities, prove, that they had brought the manufacture to a great degree of perfection. We know, that, for preserving fruits, they certainly gave the preference to glass jars; and, at the supper of TRIMALCIO, so admirably depicted by PETRONIUS, even amphoræ of glass are said to have been introduced[f]. Whether they were of the full quadrantal measure does not appear: but, in all probability, they were of more moderate dimensions, for we are told by MARTIAL, that the choicest Falernian was kept in small glass bottles[g]; and neither the number of the guests, nor the quality of the liquor, supposing it to have been genuine, would have justified the use of full-sized amphoræ, on the occasion above alluded to.

The ancients were careful to rack their wines only when the wind was northerly, as they had observed that they were apt to be turbid, when it blew in an opposite direction. The weaker sorts were transferred, in the spring, to the vessels in which they were destined to remain; the stronger kinds, during summer; but

[f] "Statim adlatæ sunt amphoræ vitreæ diligenter gypsatæ, quarum in cervicibus pittacia erant adfixa, cum hoc titulo, FALERNUM . OPIMIANUM . ANNORUM . CENTUM." —Satyric. xxxiv.

[g] ——— "quæque annus coxit Opimi,
Condantur parco fusca Falerna vitro."—Epig. ii. 40.

those grown on dry soils were not drawn off until after the winter solstice[h]. According to PLUTARCH, wines were most affected by the west wind; and such as remained unchanged by it, were pronounced likely to keep well. Hence, at Athens, and in other parts of Greece, there was a feast in honour of BACCHUS, on the eleventh day of the month Anthesterion, when the westerly winds had generally set in, at which the produce of the preceding vintage was first tasted[i]. In order to allure customers, various tricks appear to have been practised by the ancient wine-dealers: some, for instance, put the new vintage into a cask that had been seasoned with an old and high-flavoured wine: others placed cheese and nuts in the cellar, that those who entered might be tempted to eat, and thus have their palates blunted, before they tasted the wine. The buyer is recommended by FLORENTINUS to taste the wines he proposes to purchase, during a north wind, when he will have the fairest chance of forming an accurate judgment of their qualities[k].

[h] Geoponica, vii. 6. [i] Sympos. iii. quæst. 7. [k] Geoponica, vii. 7.

CHAPTER IV.

OF THE VARIETIES AND GENERAL QUALITIES OF THE ANCIENT WINES.

ROM the preceding details it must be sufficiently evident, that the ancients bestowed great attention and care on the management of their vineyards; that they were familiar with the most approved rules for the culture of the vine; that they were fully instructed in the processes necessary for giving to their wines a high degree of perfection; and that they were particularly curious in the means which they employed for bringing them to a proper degree of maturity, and for preserving them during a long term of years. Of these processes several have been handed down to their descendants, and are still practised in Italy and Greece; while others, either from their inadequacy to the purpose, or from being superseded by recent improvements, have fallen into merited disrepute. At first sight, indeed, it seems difficult to explain, on any principles consistent with a refined taste, how a predilection should come to be entertained for wines to which a quantity of sea-water had been added, or which were highly impregnated with pitch, rosin, turpentine, and a multitude of powerful aromatic ingredients; nor can we well imagine, that their strong wines, even when mellowed by age, could be rendered very exquisite by being exposed in smoky garrets, until reduced to a syrup, and rendered so muddy and thick, that it was necessary to strain them through a cloth in

order to free them from impurities, or to scrape them from the sides of the vessels, and dissolve them in hot water, before they were fit to be drunk. But, when we consider the effects of habit, which soon reconciles the palate to the most offensive substances, and the influence of fashion and luxury, which leads us to prefer every thing that is rare and costly to articles of more intrinsic excellence and moderate price, we may readily conceive, that the Greeks and Romans might have excused their fondness for pitched and pickled wines on the same plea by which we justify our attachment to tea, coffee, and tobacco. It was long ago observed by PLUTARCH, that certain dishes and liquors, which at first appeared intolerable, came, in the course of time, to be reckoned the most agreeable: and surely the charge of indulging a perverted taste in wine would proceed with an ill grace from the people of this country, where a notorious partiality exists in favour of a liquor, of which the harshness, bitterness, acidity, and other repulsive qualities, are only disguised by a large admixture of ardent spirit, but which long use has rendered so palatable to its admirers, that they fancy it the best of all possible wines.

A more attentive examination of the subject, however, will probably satisfy us, that these practices of the ancients were by no means so injurious to the qualities of their liquors, as, on a hasty view, we might be inclined to suspect. It has been already remarked, that many of the articles which entered into the composition of their condiments, were calculated to operate chiefly in the way of clarifying and fining the wines to which they were added. Others, again, would doubtless impart their own peculiar flavour; but, then, great caution was recommended in their use, lest that flavour should become too predominant; and even where this was the case, the imperfection would be often wholly or partially remedied by age. With respect to the admixture of salt water, and resinous gums, it may be observed, that both these articles are still commonly used

for the preparation of wines in modern Greece, — the former for the purpose of diluting the strong sweet wines, — the latter for giving durability to the inferior sorts; and it is well known that the skins in which the common wines are kept, in many parts of Europe, are smeared with pitch or tar. Where the must contains too large a proportion of saccharine matter, and abounds, at the same time, in the aromatic principle, as is frequently the case in the warmer climates, the addition of a moderate quantity of sea-water, far from impairing its virtues, will be found to assist the fermentation, and to improve the strength of the produce: and the pungent, harsh, and highly disagreeable taste which the other ingredients communicate in the first instance, is almost always dissipated by long keeping, at least in those wines which are made with tolerable care. When new, the ancients condemned such rosined wines as much as we could do[a]; and it was only when their rougher qualities had been subdued, that they were held in any degree of estimation.

That the ancients, on the whole, knew how to appreciate the properties of good wines, is, I think, clearly proved by the accounts which GALEN, PLINY, and others, have left us of their respective and distinguishing characters. Poets, philosophers, and historians, have all joined in celebrating the virtues of wine; and must, therefore, have been familiar with it in its best and most refined state. It is, indeed, highly improbable, that HOMER should have called the wine of his time "a divine beverage;" or that ARCHESTRATUS should have commended the juice of the Lesbian grape for its delicious fragrancy; or that HERMIPPUS should have extolled the Saprian wine, as giving the odour of violets, hyacinths, and roses, and as filling the house with the perfume of nectar and ambrosia,

[a] "Resinata bibis vina, Falerna fugis."—MARTIAL. Ep. iii. 77.
"Novitium resinatum nulli conducit."—PLIN. Hist. Nat. xxiii. 1.

when first broached[b], unless these liquors had been possessed of qualities which naturally rendered them as agreeable and fascinating to the senses, as such panegyrics would imply.

The writers who have given the most circumstantial account of the ancient wines, are Dioscorides, Pliny, Galen, and Athenæus. By the first-mentioned author the matter has been treated chiefly in relation to his own profession. He has, therefore, discussed the genuine wines in a very brief manner; communicating several useful particulars concerning their preparation and employment, but enlarging only on those which were compounded and medicated, of which he describes not less than sixty kinds. The information furnished by Pliny is much more comprehensive. That indefatigable compiler, not satisfied with his own experience, diligently availed himself of the labours of all who had preceded him; and, in the Fourteenth Book of his "Natural History," he has detailed the information concerning the culture of the vine, and the varieties and characters of the wines of his time, which he had collected from nearly seventy different authors, Grecian as well as Roman. But, as must happen to every one who undertakes this extensive subject, he became perplexed by the abundance of his materials, and abandoned in despair the endeavour to reduce them into regular order. Accordingly, the facts which he had amassed are thrown together with little regard to method; and the confusion is still

[b] Ἔστι δὲ τις οἶνος, ὃν δὴ Σαπρίαν καλέουσιν,
οὗ καὶ ἀπὸ στόματος, στάμνων ὑπανοίγομενάων,
ὄζει ἴων, ὄζει δὲ ῥόδων, ὄζει δὲ ὑακίνθου
ὀσμὴ θεσπεσία, κατὰ πᾶν δ' ἔχει ὑψιφερὲς δῶ,
ἀμβροσία καὶ νέκταρ ὁμοῦ.—Athenæus, i. 23.

There is a remarkable coincidence between this account of the Saprian, and the description which is given of old Tokay wine by a recent author. "I have drunk," says Dr. Von Derczen, "some that was forty years old; and which, on being poured into the glass, immediately filled the whole room with an aromatic etherial odour."—*Ueber Tokay's Weinbau.* Wien, 1796, p. 21.

further increased by the cramp style in which they are propounded. He does, however, make some advances towards a separation of those wines which were indigenous to his own country and its subject provinces from such as were grown beyond the seas, and distinguishes the generous kinds from the luscious-sweet, while he places the salt wines in a section by themselves. According to his reckoning, there were about eighty different sorts of generous wine, of which two-thirds belonged to Italy. But this computation is evidently defective; for ATHENÆUS has recorded the names of nearly fifty varieties, which were furnished by Greece, Asia, and Egypt, and the actual number was, in all probability, much more considerable.

The scattered observations on this topic which occur in the writings of GALEN, lead us to regret the loss of his book "On Wines;" as, from his extensive opportunities of information, and the zeal and discernment with which he prosecuted every branch of inquiry to which his attention was directed, he was, of all men, the best qualified to do justice to the subject. Two fragments, which probably formed part of the work alluded to, have been preserved by the industry of ORIBASIUS and ATHENÆUS, and contain many interesting remarks on the classification and characters of the principal Asiatic, as well as Greek and Italian wines. The authority of GALEN seems to have been justly appreciated by ATHENÆUS, who has detailed his observations at greater length than those of any other writer whom he cites, if we may judge from the manner in which they have been reported by the abridger of the "Deipnosophistæ:" for it unfortunately happens, that the two first books, in which the comparative merits of all the known wines are discussed, have not come to us in their original state; though, notwithstanding the mutilations they have suffered, they still afford much curious information on the subject, of which the commentators on ancient authors have not sufficiently availed themselves.

From these sources, then, sufficient materials for the groundwork of our inquiry are derived. By arranging and collating them with care; by availing ourselves of such illustrations as are to be found in the other writers of antiquity; and, above all, by bringing the lights of modern chemistry to bear upon the investigation;—we may succeed in obtaining a pretty accurate knowledge of the nature of ancient wines. Absolute certainty on such a subject it would be unreasonable to expect: but the judicious employment of our present means of research will enable us to make, at least, considerable approaches to the truth. It is often no easy matter to determine with precision the characters of modern wines: of course, it must be a still more difficult undertaking to describe those of ancient times. But, as the terms by which their various flavours and other sensible properties are characterized have been long sanctioned and confirmed by modern use; and as the processes employed in the preparation of them are now fully understood,—we may, in many instances, ascertain the respective degrees in which particular qualities would be imparted, and sometimes even discover to which of our present growths certain wines of the ancients bore the greatest resemblance

As, in all the more southern climates, the grape attains its full maturity, and the juice obtained from it abounds in the saccharine principle, a large proportion of the Greek and Asiatic wines may be presumed to have been of the sweet and strong kind. In fact, the taste for sweet wines seems to have always prevailed in those countries; and the epithets by which the choicer sorts are designated generally indicate that class. Homer seldom speaks of wine without using some word to denote its richness, or its honeyed sweetness[c]; and he frequently adopts several terms in conjunction to give greater effect to his description[d]. One very common expression with him

[c] οἶνος ἡδύποτος.—Od. iii. 391. μελιηδέα οἶνον.—Il. vi. 258, &c.

[d] Ἡ δὲ τρίτη κρητῆρι μελίφρονα οἶνον ἐκίρνα
ἡδὺν ἐν ἀργυρέῳ, νέμε δὲ χρύσεια κύπελλα.—Od. x. 356.

is αἴθωψ οἶνος, which, by some critics, has been understood to mean a dark or high-coloured wine; but GELLIUS[e] and MACROBIUS[f] more justly conjecture, that the phrase is descriptive of the potency or generous quality, rather than of the colour of the liquor; for, in support of their opinion, it may be observed, that the words in question are sometimes associated with others referring to the colour, as, for example, αἴθοπα οἶνον ἐρυθρόν, or "the strong red wine[g]." ATHENÆUS thinks the term may signify either a dark-coloured, or a fiery wine.

When the wine was deficient in saccharine quality, it was mixed with honey, and was then called οἰνόμελι, μελιτίτης, *mulsum*. ARISTÆUS is reported to have had the credit of this invention; and the various processes for preserving and enhancing the sweetness of wine, which afterwards came into vogue, are said to have originated from this practice, — "omnia in adulterium mellis excogitata[h]."

That the quality of sweetness, however, was by no means deemed the sole criterion of a good wine, may be inferred from the complaint of PLINY, that sweet wines are generally deficient in flavour[i]. But this censure must be received as applying chiefly to the syrupy or inspissated wines, — to those which had undergone no fermentation, or of which the fermentation had been checked, and the aroma dissipated by the process of boiling. When the fermentation was conducted in the natural manner, when the excess of sweetness was tempered by a certain degree of sharpness or astringency, and when the saccharine matter was still further decomposed by long keeping, wines of this description were found to be no longer cloying to the palate, and were accordingly held in the highest estimation. They were then said to have acquired the "*suavitatem austeram*[k]," the "*terribile dolcezza*," as REDI forcibly expresses it,

[e] Noct. Attic. xvii. 8.
[f] Saturnal. vii. 12.
[g] Od. xii. 19.
[h] PLIN. Hist. Nat. xiv. 9.
[i] "Vinum omne dulce minus odoratum: quo tenuius, eo odoratius."—Ibid.
[k] "Ita sit nobis igitur ornatus et suavis orator, nec tamen potest aliter esse, ut suavitatem habeat austeram, et solidam, non dulcem atque decoctam."—De Orat. iii. 26.

which has been always held to be the most desirable combination of tastes that liquors or viands can possess. It was, in fact, to supply this deficiency, and to correct the mawkishness of boiled and honeyed wines, that many of the condiments described in a former chapter were applied; nor can it be doubted, that their judicious employment would often produce the desired effect.

When the grapes were of a harsher quality, or contained no more saccharine principle than could be fully decomposed; when the must was fermented with the stalks and skins, and allowed to remain in the vat until the fermentation had subsided; a dry and rough wine would be produced, — differing, of course, in strength and durability, according to the quality of the materials employed. The greater part of the Italian wines seem to have been of this class; and it was chiefly with such wines that the Romans were conversant previously to their adoption of the Greek fashions. In describing the growths of the Falernian territory, PLINY observes, that none of the grapes which yielded the most celebrated wines were pleasant to the taste; and we have already seen, that for their keeping wines (*vins de garde*) the ancients gave the preference to such as were originally of an austere flavour; their roughness being always mellowed by age, and giving place to an agreeable mildness or sweetness, if there was no undue proportion of the harsher ingredients. These were the wines which they subjected to the influence of the fumaria, and kept till they had acquired the greatest perfection of which they were susceptible.

We thus arrive at the division of the ancient wines into two chief classes; namely, SWEET, and DRY; and an intermediate order, which was both sweet and dry, or SWEETISH (*subdulce.*) Of these the qualities were as various as the places of their growth.

With regard to the sweet wines of the Greeks, it may be remarked, that they were principally of the luscious kind, like the produce of the present Cyprus or Constantia grapes, as appears from the distinction which HIPPOCRATES makes between them and

fully fermented wine (οἰνώδεα[1]). But, in some of the works falsely ascribed to that author, mention is made of light sweet wines, which, from what is known concerning the prevailing modes of preparation, we may conclude to have been analogous to the *dolce-piccanti* wines of the present day. The former came properly under the denomination of γλυκὺς, *dulcis*, while to the latter the epithet ἡδὺς, *suavis*, was applied. On the other hand, several of the dry wines, as, for instance, the Pramnian and Corinthian, were distinguished by an extraordinary degree of roughness and astringency, and only became drinkable after they had been kept a great number of years.

As the must was sometimes allowed to undergo a slight fermentation in close vessels, we may easily conceive, that the wine, when freshly drawn, would occasionally possess a certain degree of briskness, from the retained carbonic acid gas: and frequent allusions of the poets to this property demonstrate, that the ancients were familiar with SPARKLING and FROTHING wines[m], though it does not appear, that they intentionally adopted the means of preserving them in this condition.

In consequence of the long-continued fermentation in the vat, the stronger wines were generally very high-coloured, at least when made from black or red grapes. Those produced from white grapes were of a yellow or amber tint; and some of the richest sweet wines, such as the Tmolites and Lesbian, were of this latter species. The red wines, as we may collect from GALEN, were of a fuller body; and those which approached to a black colour possessed this distinction in a more marked degree. Of the white wines, strictly so called, none were sweet; but some were austere and

[1] De Vict. in Acut. Ratione.

[m] ———— "Ille impiger hausit
Spumantem pateram."—VIRG. Æneid. i. 738.

Ἔχευε δὲ ἓν μὲν δέπας κίσσινον μελαίνας σταγόνος ἀμβρότας, ἀφρῷ βρυάζον.—TIMOTH. apud ATHEN. xi. 3. See also the quotations from ANTIPHANES and EUBULUS, in the sixth chapter.

thick, and others thin and light. When the dark wines were long kept, they changed from black to a claret, or tawny colour[n].

The ancient wines were, for the most part, designated according to the places where they grew: but occasionally they borrowed the appellation of the grapes from which they were made; and the name of the vine, or vineyard, stood indiscriminately for that of the wine. When very old, they received certain epithets indicative of that circumstance, as σαπρίας, *consulare*[o], *Opimianum Annicium*. But, as it sometimes happened, that, by long keeping, they lost their original flavour, or acquired a disagreeably bitter taste, it was not unusual to introduce into them a portion of must, with the view of correcting these defects: wine thus cured was called *vinum recentatum*. The wine presented to persons of distinction was termed γερούσιος[p], or *honorarium*. Such was the rich sweet wine, of which Ulysses had twelve amphoræ given him by Maron, and which was so highly valued by the donor, that he kept it carefully concealed from all his household, save his wife and the intendant of his stores, as its attractions were not easily resisted.

None of the more generous wines were reckoned fit for drinking before the fifth year, and the majority of them were kept for a much longer period. The thin white wines are stated by Galen to have ripened soonest; acquiring, first, a certain degree of sharpness, which, by the time they were ten years old, gave place to a grateful pungency, if they did not turn acid within the first four years. Even the strong and dry white wines, he remarks, notwithstanding their body, were liable to acescency after the tenth year, unless they had been kept with due care: but if they escaped this

[n] Oribas. Coll. Med. v. 6.

[o] "Potavi modo consulare vinum:
Quæris quam vetus atque liberale?
Ipso consule conditum; sed ipse
Qui ponebat, erat, Severe, consul."—Mart. Ep. vii. 78.

[p] γερούσιον αἴθοπα οἶνον.—Il. iv. 259.

danger, they might be preserved for an indefinite length of time. Such was the case more especially with the Surrentine wine, which continued raw and harsh until about twenty years old, and afterwards improved progressively; seldom contracting any unpleasant bitterness, but retaining its qualities unimpaired to the last, and disputing the palm of excellence with the growths of Falernum[q]. The transmarine wines which were imported into Italy were thought to have attained a moderate age in six or seven years; and such as were strong enough to bear a sea voyage were found to be much improved by it[r].

The lighter red wines (*vina horna*, *fugacia*) were used for common drinking, and would seldom endure longer than from one vintage to another; but, in good seasons, they would sometimes be found capable of being preserved beyond the year. Of this description we may suppose that Sabine wine to have been, which HORACE calls upon his friend to broach when four years old[s]; although, in general, the proper age of the Sabinum was from seven to fifteen years; and the poet has abundantly shown, in other parts of his works, that he knew how to value old wine, and was seldom content with it so young. The stronger dark-coloured wines, when long kept, necessarily underwent a species of decomposition (*cariem vetustatis*), from the precipitation of part of the extractive matter which they contained. This, and the pungency (*acumen*) which such wines acquired, were justly esteemed the proofs of their having arrived at their due age. The genuine flavour of the vintage was then fully developed, and all the roughness of its early condition was removed. From the mode, however, in which the ancient wines were preserved, a greater or less inspissation took place; and, if we may depend on the statement of PLINY, this was most observable in

[q] ORIBAS. Coll. Med. v. 6.

[r] PLIN. Hist. Nat. xiv. 18.

[s] "Deprome quadrimum Sabinâ,
O Thaliarche, merum diota."—Carm. I. ix. 7.

the more generous kinds; and the taste became disagreeably bitter, obscuring the true flavour of the liquor. Wine of a middle age was, therefore, to be preferred, as being the most wholesome and grateful[t]: but in those days, as well as ours, it was the fashion to place the highest value on whatever was rarest, and an extravagant sum was often given for wines which were literally not drinkable. Such seems to have been the case with the famous vintage of the year in which L. Opimius Nepos was consul, being the six-hundredth and thirty-third from the foundation of the city; when, from the great warmth of the summer, all the productions of the earth attained an uncommon degree of perfection. Velleius Paterculus, who flourished about a hundred and fifty years afterwards, denies that any of it was to be had in his time[u]; but both Pliny and Martial, who were considerably posterior to that historian, describe it as still inexhausted at the period when they wrote. The former, indeed, admits, that it was then reduced to the consistence of honey, and could only be used in small quantity for flavouring other wines, or mixing with water[x]. Reckoning the original price to have been one hundred *nummi*, or sixteen shillings and sixpence, for the amphora, he calculates, that, according to the usual rate of Roman interest, a single ounce of this wine, at the time of the third consulate of Caligula, when it had reached its hundred and sixtieth year, must have cost, at least, one nummus, or twopence; which would make the price of the quart amount to six shillings and sixpence English[y].

As the ordinary wines of Italy were produced in great abundance,

[t] Hist. Nat. xxiii. 1.

[u] Hist. Rom. ii. 7.

[x] "Durant adhuc vina ducentis ferè annis, jam in speciem redacta mellis asperi: nec potari per se queunt si non pervincat aqua, usque in amaritudinem carie indomita; sed cæteris vinis commendandis minima aliqua mistura medicamenta sunt."—Hist. Nat. xiv. 4.

[y] See Langwith's Observations on Arbuthnot's Tables of Ancient Coins, &c. p. 37.

they were often sold at very moderate prices. COLUMELLA's reduced estimate would make the cost about fourpence the gallon: but we find from PLINY, that, when LICINIUS CRASSUS and JULIUS CÆSAR were consuls, an edict was issued by them, prohibiting the sale of Greek and Aminean wine for eight *asses* the amphora, which would be less than one penny a gallon; and the same author asserts, on the authority of VARRO, that, at the time of METELLUS' triumph, the *congius*, a somewhat smaller measure than our gallon, was to be bought for a single *as*, or about three farthings of our money[z]. With these very low prices, however, it is not easy to reconcile the statement of CICERO as to the rate of duties which were occasionally levied on wines. Thus one of the charges of mal-administration brought against M. FONTEIUS was, that he had raised an undue sum of money in this manner: but CICERO proves the practice to have been by no means unusual; and mentions, among other instances, that of TITURIUS, who had exacted not less than sixteen sestertii, or two shillings and sevenpence, for the amphora, on the entry of wines into Toulouse[a], which would be upwards of four times the amount of the prices last quoted.

The ancients were fully skilled in the rules by which a good and durable wine is to be known. They observed, that the wine which was grown on elevated exposures, and produced from vines bearing a small quantity of fruit, was the soundest and most lasting; while that obtained from low grounds was generally of indifferent quality. In like manner, those wines, which were of a harsh flavour when recent, turned out the most durable: while such as were sweet and delicate at first did not keep long. In allusion to this criterion, SENECA quotes the remark of ARISTON, "that he should give the preference to a youth of a grave disposition, rather than to one who was conspicuous for his gaiety and engaging manners: for that wine, which tasted hard and rough when new,

[z] Hist. Nat. xiv. 14; xviii. 3.

[a] Orat. pro M. Fonteio, 5.

often acquired by age a high degree of excellence; but that which pleased in the wood never proved durable[b]."

With the properties and various preparations of vinegar the ancients were early acquainted. Its medical uses have been detailed by HIPPOCRATES, GALEN, and CELSUS; and it is well known to have formed part of the equipage of the Roman soldiers, to whom it afforded, when mixed with water, a convenient and grateful beverage on their toilsome marches. In the preface to the twelfth volume of the "Thesaurus Antiquitatum Romanarum," GRÆVIUS endeavours to prove, from a passage of ULPIAN, respecting a legacy in which the word '*acetum*' occurs, that the correct interpretation is an *acidulous wine*, and not vinegar properly so called; but the mode in which the term is used by PLINY, and other writers of repute, can leave no doubt as to its true meaning. The *posca* of the Romans is generally believed to have been a mixture of vinegar and water: but it would appear that the name was sometimes applied to other sorts of liquor; for we are told by SUETONIUS, that ASIATICUS, the favourite freedman of VITELLIUS, after he first quitted the emperor, had become a vender of posca at Puteoli; and it can hardly be supposed, that the mere mixing of vinegar and water could by itself have formed a distinct branch of trade.

[b] "Malle se adolescentem tristem, quam hilarem et amabilem turbæ. Vinum enim fieri bonum, quod recens durum et asperum visum est; non pati ætatem, quod in doliis placuit."—Epist. xxxvi.

CHAPTER V.

OF THE PRINCIPAL GREEK AND ASIATIC WINES.

MONG the Greek wines, the earliest of which we have any distinct account is the Maronean; probably the production of the territory of that name on the coast of Thrace, or of Ismarus, near the mouth of the Hebrus, where Ulysses received the supply which he carried with him on his voyage to the land of Cyclops. It was a black sweet wine; and, from the evident delight with which Homer enlarges on its virtues, we may presume it to have been of the choicest quality. He describes it as "rich, unadulterate, and fit drink for gods," and as so potent, that it was usually mixed with twenty measures of water;—

> "And even then the beaker breathed abroad
> A scent celestial, which whoever smelt,
> Thenceforth no pleasure found it to abstain[a]."

Pliny mentions the growths of Maronea as being still in high estimation in his time, and of so strong a nature, that they were commonly drunk much diluted, namely, with eight parts of water to one of wine: and we collect from Dr. Sibthorp's observations, that one of the species of grapes now cultivated in the island of Zante is called *maronites*[b]; the colour, however, is white. Other

[a] Cowper's Homer, Od. ix. 248.

[b] Walpole's Memoirs relating to European and Asiatic Turkey, p. 293.

parts of Thrace were famous for their wines, but Ismarus seems to have longest maintained its credit[c]. The black wine of Sciathos, mentioned by one of the poets, must have been of a much lighter quality, as it was drunk with only an equal measure of water.

The Pramnian, which was a red, but not a sweet wine, appears to have been of equal antiquity; for we find HECAMEDE, under the direction of NESTOR, preparing a copious draught of it for MACHAON, when he received the wound in his shoulder:—

——— "The nymph of form divine
Pours a large portion of the Pramnian wine;
With goat's milk cheese a flavorous taste bestows,
And last with flour the smiling surface strews.
This for the wounded prince the dame prepares,
The cordial beverage reverend NESTOR shares[d]."

According to certain writers, the Pramnian was derived from the island Icarus, where there was a rocky hill of that name; others describe it as the growth of Ephesus, or Lesbos; while some, again, suppose, that the appellation was intended to express its durable quality, *quasi* παραμένιος, or denoted a particular grape from which it was made[e]. Be this as it may, we have sufficient authority for pronouncing it to have been a strong, hard, astringent liquor; and perhaps we shall not err much, if we compare it to our common Port wine. It was neither sweet nor thick, but austere, and remarkably potent and durable; in all which particulars it perfectly resembled the modern growth, to which I have ventured to assimilate it. Like Port, too, it was much commended for its medicinal uses,

[c] "Ampelon intonsum, satyris nymphaque creatum,
Fertur in Ismariis Bacchus amâsse jugis."—OVID. Fast. iii. 409.
——— "Juvat Ismara Baccho
Conserere."—VIRG. Georg. ii. 35.

[d] POPE'S HOMER, Il. xi. 780.

[e] ATHENÆUS, i. 24.

and on that account was sometimes called *pharmacites*. The Athenians, however, would seem to have had no relish for a beverage of this character; for ARISTOPHANES tells us, "that they disliked those poets who dealt in the rough and horrible, as much as they abominated the harsh Pramnian wine, which shrivelled the features, and obstructed the digestive organs." But in these respects it was far exceeded, if we may rely on the testimony of ALEXIS, by the Corinthian wine, which to drink, he says, was actual torture[f]. In the age of PLINY, the Pramnian was still a noted growth of the vicinity of Smyrna.

It was in the luscious sweet wines that the Greeks surpassed all other nations, and to this class the commendations of their later poets must be regarded as chiefly applying. They were, for the most part, the products of the islands of the Ionian and Ægean seas, where the cultivation of the vine was assiduously practised, and where the finest climate, and the choicest soils and exposures, gave to its fruit an uncommon degree of excellence. Lesbos, Chios, and Thasos, in particular, seem each to have contended for the superiority of its growths; but several of the other islands, such as Corcyra, Cyprus, Crete, Cnidos, and Rhodes, yielded wines which were much esteemed for their sweetness and delicacy; and it was from them that the greater part of Europe was supplied, till a comparatively recent period, with the richest sweet wines.

It has been already observed, that these wines were not white, in the proper acceptation of the term; but rather of a straw or amber colour, according to their greater or less age. This hue they would naturally derive from their being fermented along with the skins of the grapes, which were used in their ripest state, or after they had become partially dried, and which, being generally of the muscat sort, would impart a grateful perfume to the liquor,—

[f] Ὁ γὰρ Κορίνθιος βασανισμός ἐστι.—ATHENÆUS, ut supra.

a quality on which the Greeks placed a due value, as may be seen from the frequent allusions to it by their poets. The exquisite aroma of the Saprian, which was probably Chian wine matured by great age, has been noticed in the preceding chapter. The Lesbian would seem to have been less odorous, but to have possessed a delicious flavour, for it is said to have deserved the name of ambrosia rather than of wine, and to have been like nectar when old[g]. HORACE terms the Lesbian an 'innocent' wine[h]; but it was the prevailing opinion among the ancients, that all sweet wines were less injurious to the head, and less apt to cause intoxication, than the strong dry wines. By PLINY, however, the growths of Chios and Thasos are placed before the Lesbian, which, he affirms, had naturally a saltish taste; but the Clazomenian, which came from the coast of Ionia, and which was less adulterated with sea-water, is said to have been preferable to all the others, on account of its purer flavour. The Thasian was a generous sweet wine, ripening slowly, and acquiring by age a delicate odour of the apple. The Chian, again, is, by some writers, described as a thick luscious wine; and that which grew on the craggy heights of Ariusium, extending three hundred stadia along the coast, is extolled by STRABO as the best of all Greek wines[i]. From ATHENÆUS we learn, that the produce of the Ariusian vineyards was usually divided into three distinct species, — a dry wine, a sweetish wine, and a third sort of a peculiar quality, thence termed αὐτόκρατον[k]. All of them seem to have been excellent of their kind, and they are frequently alluded to in terms of the highest commendation[l].

[g] ATHENÆUS, i. 22.

[h] "Hic innocentis pocula Lesbii
Duces sub umbra."—Carm. I. xvii. 21.

[i] Geographia, xiv. [k] Lib. i. c. 25.

[l] "Vina novum fundam calathis Arivisia nectar."—VIRG. Bucol. v. 71.

"Ambrosiis Arivisia pocula succis."—SIL. ITAL. vii. 210.

The Phanean, which is extolled by VIRGIL as the king of wines, was also the product of the same island. The wines of Naxos, Rhodes, and Cos, on the other hand, were still more liable to the censure passed on the Lesbian in PLINY's time; and those of Zante and Leucadia had the character of being heady. As the latter were prepared with gypsum, they were probably of a drier nature, and more potent quality, than the wines of the other islands.

Among the lighter kinds, the Mendean, which most likely took its name from Mende, a town in Thrace, was a white wine, and of such moderate strength, that it bore dilution with only three parts of water. For the manufacture of it, the grapes, while still hanging on the vine, are said to have been sprinkled with elaterium, which was supposed to impart a peculiar softness to the wine. The Argitis, celebrated by VIRGIL for its extraordinary durability, and procured from a small grape abounding in juice, is also believed to have been a white wine[m]. If this conjecture be well-founded, we may discover some analogy between it and the best growths of the Rhine, which are obtained from a small white grape, and are remarkable for their permanency. A light rough wine, named Omphacites, was procured in Lesbos and Thasos from a particular species of grape, which was gathered before it had attained its full maturity, and exposed to the sun three or four days previously to pressure. After the first fermentation was over, the casks were kept in a sunny situation, till the wine was sufficiently ripened[n].

The above are all the principal wines of Greece to which it is possible to assign distinctive characters. But, besides these indigenous growths, the Greeks were familiar with the produce of the African and Asiatic vines, of which several enjoyed a high reputa-

[m] "Argitisve minor, cui non certaverit ulla,
Nec tantum fluere, aut totidem durare per annos."—Georg. ii. 99.

[n] DIOSCORIDES, v. 12.

tion, and may be considered as the parent stocks from which the first Grecian vineyards were supplied. According to FLORENTINUS, some of the Bithynian wines, but especially that procured from a species of grape called *mersites*, were of the choicest quality[o]; the wines of Byblos, in Phœnicia, on the other hand, vied in fragrancy with the Lesbian; and, if we may confide in the report of ATHENÆUS, the white wines of Mareotis and Tænia, in Lower Egypt, were of almost unrivalled excellence. The former, which was sometimes called Alexandrian, from the neighbouring territory, was a light, sweetish, white wine, with a delicate perfume, of easy digestion, and not apt to affect the head; though the allusion of HORACE to its influence on the mind of CLEOPATRA would seem to imply, that it had not always preserved its innocuous quality[p]. The wine of Meröe, however, which was produced at the feast given to CÆSAR by that voluptuous female, would appear to have been in still higher estimation, and to have borne some resemblance to the Falernian[q]. The Tæniotic, on the other hand, which derived its name from the narrow strip of land where it grew, was a grey, or greenish wine (ὑπόχλωρος), of a greater consistence and more luscious taste than the Mareotic, but accompanied with some degree of astringency, and a rich aromatic odour. The wine of Antylla, also the produce of the vicinity of Alexandria, was the only remaining growth, from among the numerous vineyards which adorned the banks of the Nile, that attained any degree of celebrity[r]. PLINY commends the Sebennytic wine, which he describes as made

[o] Geoponica, v. 2.

[p] "Mentemque lymphatam Mareotico
Redegit in veros timores
Cæsar."—Carm. I. xxxvii. 14.

[q] ——————— "Gemmæque capaces
Excepere merum, sed non Mareotidos uvæ,
Nobile sed paucis senium cui contulit annis
Indomitum Meröe cogens spumare Falernum."—LUCAN. Pharsalia, x. 161.

[r] ATHENÆUS, i. 25.

from three kinds of grape, but without affording the means of determining its peculiar quality.

On the mountain Tmolus, in Lydia, a brown sweet wine was produced, which is classed by VIRGIL and GALEN among the first-rate growths, but described by PLINY as too luscious to be drunk by itself, and as chiefly used for flavouring and correcting the harshness of other wines. The Scybellites, so called from the place of its growth in Galatia, is only noticed by GALEN on account of its thickness and extreme sweetness. The Abates, which was a wine of Cilicia, appears, from his report, to have been a sweetish wine, of a red colour. The Tibenum, Arsynium, and Titucazenum, are enumerated by the same author among the lighter growths of his native country: the two first were probably dry red wines; the latter is described as a sweet wine, but not very rich or high-coloured. They ripened the soonest of all the Asiatic wines.

CHAPTER VI.

OF THE PRINCIPAL WINES OF THE ROMANS.

DURING the early ages of the Republic, it is doubtful whether the Romans were much accustomed to the use of wine; for the constant predatory warfare with the neighbouring states in which they were engaged must have prevented them from giving that attention to their vineyards, which was necessary for bringing the produce to any degree of perfection. ROMULUS directed milk to be used for the libations to the gods; and a posthumous law of NUMA forbade the sprinkling of the funeral pile with wine[a], merely, as PLINY conceives, on account of its scarcity. That the vine, however, was partially cultivated in those times, may be inferred from the fact of MEZENTIUS, king of Hetruria, having been paid in wine for the succour which he afforded the Rutilians in their war against the inhabitants of Latium. It was not until the six hundredth year of the city, if the assertion of the author just quoted be correct, that the Italian wines came into such vogue, as to be deemed superior to those of all other countries.

Few parts of Italy proved unfriendly to the vine; but it flourished most in that portion of the south-western coast, to which, from its extraordinary fertility and delightful climate, the name of *Campania felix* was given. Concerning the extent of the territory in question, there is some difference of opinion among ancient authors, in consequence of the various boundaries that were successively

[a] "Vino rogum ne respergito."—Hist. Nat. xiv. 12.

assigned to it[b]; but PLINY and STRABO, who have given the fullest account of its geography, confine the appellation to the level country reaching from Sinuessa to the promontory of Sorrento, and including the *Campi Laborini*, from which the present name *Terra di Lavoro* is derived. The exuberant produce of the rich and inexhaustible soil of the whole of this district, which is so happily exposed to the most genial breezes, while it is sheltered by the Apennines from all the colder winds, has called forth the eulogies of every writer who has had occasion to mention it. There the earth yields its choicest fruits almost unbidden,—"ipsa volentia rura,"—refusing not even the growths of the torrid zone[c]: and, if the inhabitants too often remain insensible to the advantages of their situation, the traveller cannot fail to be charmed with the luxuriant display of vegetable life,—the "pompa maggior della natura," as TASSO emphatically terms it,—which bursts upon his sight. "The Campania," says FLORUS, "is the most beautiful region, not only of Italy, but of the whole globe. Nothing can surpass the mildness of its climate; for it is blessed with a double spring. Nothing can exceed the fecundity of its soil; hence the contest between CERES and BACCHUS for its possession. Nor is there a more hospitable sea, than that which washes its shores. Here are the noble havens of Cajeta, Misenum, and Bajæ, renowned for its tepid springs; here the Lucrine and Avernian lakes, where the ocean may be said to repose from its storms. Here are the vine-covered hills of Gaurus, Falernus, Massicus, and, above all, Vesuvius, the rival, as it were, of the Ætnæan fires[d]."

[b] See C. PEREGRINI Diss. de Pluribus Campaniis Veterum, in GRÆV. Thes. Antiq. Ital. ix. 2. Into the question of the etymology of the word *Campania* it would be foreign to my purpose to enter. The author just mentioned derives it from κάμπειος, *flexuosus;* but this is literally calling that crooked which all the world pronounces to be straight.

[c] Cotton has been cultivated on the plain of Sorrento with so much success, as to furnish in one year (1812) to the amount of 60,000 bales.—See CHATEAUVIEUX, Lettres écrites d'Italie, Tom. II. p. 59.

[d] Epitome Rer. Roman. i. 16.

From this district, then, the Romans obtained those vintages which they valued so highly, and of which the fame extended to all parts of the world. In ancient times, indeed, the hills by which the surface is diversified seem to have formed one continued vineyard; and every care was taken to maintain the choice quality of the produce. With respect to the locality and designation of particular celebrated spots, much controversy has arisen among critics. In the quotation from Florus, which has been adduced, Falernus is spoken of as a mountain, and Martial describes it under the same title[e]; but Pliny, Polybius, and others, denominate it a field, or territory (*ager*); and, as the best growths were styled indiscriminately Massicum and Falernum, Peregrini concurs with Vibius in deciding, that *Massicus* was the proper appellation of the hills which rose from the Falernian plain. By a similar mode of reasoning it might be inferred, from the term '*arvis*,' which occurs in conjunction with 'Massicus,' in the splendid description of the origin of the Falernian vineyards given by Silius Italicus, that the epithet 'Massicus' was applicable to the more level grounds:—

——————— "Hic ubi primo
Ungula dispersit rores Phaëthontia Phœbo,
Uviferis latè florebat Massicus arvis,
Miratus nemora et lucentes sole racemos.
Id monti decus, atque ex illo tempore dives
Tmolus, et ambrosiis Ariusia pocula succis,
Ac Methymna ferox lacubus cessere Falernis[f]."

[e] Nec in Falerno monte major autumnus.—Ep. xii. 57.

[f] —— "When the rising sun dispers'd the dew,
The Massic swains, with admiration, view
Their fields with vines, like groves, most richly crown'd,
And with the sun the branches shining: round
The hill their glory spread, and since that hour
Rich Tmolus, and Arvisian cups, that pour
Ambrosian liquor forth, and thy fair field,
Fertile Methymna, to Falernus yield."
Punicor. vii. 205. Englished by T. Ross, 1661, p. 190.

The truth seems to be, that the choicest wines were produced on the southern declivities of the range of hills which commence in the neighbourhood of the ancient Sinuessa, and extend to a considerable distance inland, and which may have taken their general name from the town or district of Falernum: but the most conspicuous, or the best exposed among them, may have been the Massicus; and as, in process of time, several inferior growths were confounded under the common denomination of Falernian, correct writers would choose that epithet which most accurately denoted the finest vintages. If, however, it be allowable to appeal to the analogy of modern names, the question as to the locality will be quickly decided; for the mountain that rises from the Rocca di Mondragone, which is generally allowed to point to the site of the ancient Sinuessa, is still known by the name of *Monte Massico*. That the Massic wines were grown here, is sufficiently proved by the testimony of MARTIAL, who describes them as the produce of the Sinuessan vineyards[g]. At a short distance to the east, and on the slope of the adjacent ridge, are two villages, of which the upper is called *Falciano a monte*, and the lower, *Falciano a basso*. Here was the ancient *Faustianum*, of which *Falciano* is a corruption.

BARRY, on the other hand, without specifying his authority, and in contradiction to the writers whom he cites, affirms, that the original names of the hills of this district were changed in the course of time, and supposes that Gaurus was called Massicus, &c.[h] But we find PLINY, as well as FLORUS, enumerating them as separate mountains of the Campania[i], and, as far as I am aware, there exists not a particle of evidence to show that they were ever thus confounded. On the contrary, there are numerous proofs of their

[g] "De Sinuessanis venerunt Massica prælis."—Epig. xiii. 111.

[h] Observations on the Wines of the Ancients, p. 111.

[i] "Ab hoc sinu [Sinuessæ] incipiunt vitiferi colles, et temulentia nobilis succo per omnes terras inclyto, atque ut veteres dixerunt, summum Liberi patris cum Cerere certamen. Hinc Setini et Cæcubi protenduntur agri: his junguntur Falerni, Caleni: dein consurgunt Massici, Gaurani, Surrentinique montes."—Hist. Nat. iii. 5.

having been divided by nearly the whole length of the Campania; the Massicus rising at its northern extremity, and Gaurus being a volcanic mountain, in the neighbourhood of Cumæ and Pozzuoli[k], —in all probability the same as that which now takes the name of *Monte Corvaro*, or *Barbaro*. When the description of a country is precise and consistent, it is surely not the part of a judicious critic to hazard unsupported assertions, and pretend to elucidate its geography, by maintaining that one spot was sometimes called by the name of another. It is true, as we learn from PLINY, and know to be frequently the case in modern times, that, when any choice vine was transplanted to a distant territory, the produce was often brought into the market under the denomination of the parent stock. The fame of the Falernian grape induced the proprietors of the Gauranian vineyards to cultivate it in their grounds, where it commonly degenerated after a short time; but in the best exposures it would probably retain much of its native excellence[l]; and the wine made from it would accordingly be disposed of as the true Massic, or Falernian.

The account which PLINY has furnished of the wines of the Campania is the most circumstantial, and, as no one had greater opportunities of becoming familiar with the principal growths of his native country, doubtless the most correct. "AUGUSTUS, and most of the leading men of his time," he informs us, "gave the preference to the Setine wine that was grown in the vineyards above the Forum Appii, as being of all kinds the least apt to injure the stomach. Formerly the Cecuban, which came from the poplar marshes of Amycla, was most esteemed: but it has now lost its repute, partly from the negligence of the growers, and

[k] "Tales Cumano disputat in æquore ludos
Liber, sulphurei cum per juga consita Gauri,
Perque vaporiferi graditur vineta Vesevi."—AUSON. Mosel. 208.

[l] "Certant Massica æque, ex monte Gaurano Puteolos Baiasque prospectantia."—PLIN. Hist. Nat. xiv. 6.

partly from the limited extent of the vineyard, which has been nearly destroyed by the navigable canal that was begun by NERO from Avernus to Ostia. The second rank used to be assigned to the growths of the Falernian territory, and among them, chiefly to the Faustianum. The territory of Falernum begins from the Campanian bridge on the left hand as you go to Urbana, which has been recently colonized, and placed under the jurisdiction of Capua by SYLLA: the Faustian vineyards, again, are situated about four miles from the village in the vicinity of Cediæ, which village is six miles from Sinuessa. The wines produced on this soil owe their celebrity to the great care and attention bestowed on the manufacture; but latterly they have somewhat degenerated from their original excellence, in consequence of the rapacity of the farmers, who are usually more intent upon the quantity than the quality of the vintages. They continue, however, in the greatest estimation; and are, perhaps, the strongest of all wines, as they burn when approached by a flame. They are of three kinds, namely, the dry, the sweet, and the light Falernian. Some persons class them somewhat differently, giving the name of Gauranum to the wine made on the tops of the hills, of Faustianum to that which is obtained from the middle region, and reserving the appellation of Falernian for the lowest growths. It is worthy of remark, that none of the grapes which yield these wines are at all pleasant to the taste[m]."

With respect to the first of the above-mentioned wines, it is surprising, that, notwithstanding the high commendation of AUGUSTUS, the Setinum is never once mentioned by HORACE, although he has expatiated, with all the fervour of an amateur, on the other first-rate growths of his time. Perhaps he took the liberty of differing from the imperial taste in this particular, as the Setine was a delicate light wine, and he seems to have had a predilection

[m] Hist. Nat. xiv. 6.

for such as were distinguished by their strength. Both MARTIAL and JUVENAL, however, make frequent mention of it; and SILIUS ITALICUS declares it to have been so choice, as to be reserved for BACCHUS himself,—"ipsius mensis seposta Lyæi." GALEN commends it for its innocuous qualities. It was grown on the heights of Sezza[n], and, though not a strong wine, possessed sufficient firmness and permanency to undergo the operation of the fumarium; for we find JUVENAL alluding to some which was so old, that the smoke had obliterated the mark of the jar in which it was contained,—

"Cujus patriam titulumque senectus
Delevit multa veteris fuligine testæ[o]."

The Cecuban, on the other hand, is described by GALEN as a generous, durable wine, but apt to affect the head, and ripening only after a long term of years[p]. In another place, he remarks, that the Bithynian white wine, when very old, passed with the Romans for Cecuban; but that, in this state, it was generally bitter and unfit for drinking[q]. From this analogy we may conclude, that, when new, it belonged to the class of rough sweet wines. It appears to have been one of HORACE's favourite wines, of which he speaks, in general, as reserved for important festivals[r]. After

[n] ——— "Paludes delicata Pontinas
Ex arce clivi spectat uva Setini."—MART. x. 74.

[o] Sat. v. 34. [p] ATHENÆUS, i. 21. [q] ORIBASIUS, v. 6.

[r] "Antehac nefas depromere Cæcubum
Cellis avitis."—Carm. I. 37.

"Quando repostum Cæcubum ad festas dapes,
Victore lætus Cæsare,
Tecum sub alta, sic Jovi gratum, domo,
Beate Mæcenas, bibam?"—Epod. ix. i.

"Festo quid potius die
Neptuni faciam? Prome reconditum,
Lyde, strenua Cæcubum,
Munitæque adhibe vim sapientiæ."—Carm. iii. 28.

the breaking up of the principal vineyards which supplied it, this wine would necessarily become very scarce and valuable; and such persons as were fortunate enough to possess any that dated from the Opimian vintage, would preserve it with extraordinary care[s]. In fact, we are told by PLINY, in a subsequent book, that it was no longer grown,—"Cæcuba jam non gignuntur,"—and he also alludes to the Setine wine as an article of great rarity[t]. The Fundanum, which was the produce of the same territory, if, indeed, it was a distinct wine, seems to have partaken of the same characters, being, according to GALEN's report, strong and full-bodied, and so heady, that it could only be drunk in small quantity.

There can be little doubt, that the excellence of these wines is to be attributed chiefly to the loose volcanic soils on which they were produced. Much also depended on the mode of culture; and I am inclined to think, that the great superiority of the growths of the Falernian vineyards was, in the first instance, owing to the vines being there trained on *juga*, or low frames, formed of poles[u], instead of being raised on poplars, as was the case in several of the adjacent territories. Afterwards, when the proprietors, in consequence of the increasing demand for their wines, became desirous to augment the quantity, they probably adopted the latter practice, and, forcing the vines to a great height, sacrificed the quality of the fruit. Two facts bearing on this point, and deserving of particular attention, as they show in the clearest manner how much the characters of wine may be modified by slight variations of the seasons, are noticed by GALEN. "There are," he observes, "two sorts of Falernian, the dry, and the sweetish, which latter is produced only when the wind continues in the south during the vintage; and

[s] "Massica solus habes, et Opimi Cæcuba solus."—MART. Ep. iii. 26.

"Absumet hæres Cæcuba dignior
Servata centum clavibus."—HOR. Carm. ii. 14.

[t] Hist. Nat. xxiii. 1.

[u] "Pertica in Falerno."—VARRO de Re Rustica, i. 8.

from the same cause it also becomes of a deeper hue (μελάντερος); but, in other circumstances, the wine obtained is dry, and of a yellowish colour (αὐστηρὸς καὶ τῷ χρώματι κιρρός[x])." The operation of the same causes will be found to effect a similar change in the character of several of our modern vintages.

No wine has ever acquired such extensive celebrity as the Falernian, or more truly merited the name of 'immortal[y],' which MARTIAL has conferred upon it. At least, of all ancient wines, it is the one most generally known in modern times: for, while other eminent growths are overlooked or forgotten, few readers will be found who have not formed some acquaintance with the Falernian; and its fame must descend to the latest ages, along with the works of those mighty masters of the lyre who have sung its praises. But, although the name is thus familiar to every one, scarcely any attempt has been made to determine the exact nature and properties of the liquor; and little more is understood concerning it, than that the ancients valued it highly, kept it until it became very old, and produced it only when they wished to regale their dearest friends. At this distance of time, indeed, and with the imperfect data which we possess, no one need expect to demonstrate the precise qualities of that or any other wine of antiquity; though, by collating the few facts already stated with some other particulars which have been handed down to us respecting the Falernian vintages, I am not without hope, that it may be possible to make some approach to a more correct estimate of their true characters, and, at the same time, to point out those modern growths to which they have the greatest resemblance.

In the first place, all writers agree in describing the Falernian wine as very strong and durable, and so rough, in its recent state, that it could not be drunk with pleasure, but required to be kept a great number of years, before it was sufficiently mellow. HORACE

[x] ATHENÆUS, i. 21.

[y] "Addere quid cessas, puer, immortale Falernum?"—Ep. ix. 95.

even terms it a 'fiery' wine, and calls for water from the spring to moderate its strength[z]; and PERSIUS applies to it the epithet 'indomitum,' probably in allusion to its heady quality[a]. From GALEN's account, it appears to have been in best condition from the tenth to the twentieth year; afterwards it was apt to contract an unpleasant bitterness: yet we may suppose, that when of a good vintage, and especially when preserved in glass bottles, it would keep much longer, without having its flavour impaired. HORACE, who was a lover of old wine, proposes, in a well-known ode, to broach an amphora, which was coeval with himself, and which, therefore, was probably not less than thirty-three years old; as TORQUATUS MANLIUS was consul in the six hundred and eighty-ninth year from the foundation of the city, and CORVINUS, in honour of whom the wine was to be drawn, did not obtain the consulate till the year DCCXXIII. As he bestows the highest commendation on this sample, ascribing to it all the virtues of the choicest vintages, and pronouncing it truly worthy to be produced on so happy a day, we must believe it to have been really of excellent quality. In general, however, it probably suffered, more or less, from the mode in which it was kept; and those whose taste was not perverted by the rage for high-dried wines, preferred it in its middle state. Thus CICERO, when animadverting on the style of the orations which THUCYDIDES has introduced in his History, and which, he conceives, would have been more polished if they had been composed at a later period, takes occasion to illustrate the subject of his discourse by a reference to the effects of age upon wine. "Those orations," he remarks, "I have always been disposed to admire: but I neither would imitate them, if I could,

[z] ——— "Quis puer ocius
Restinguet ardentis Falerni
Pocula prætereunte lympha?"—Carm. ii. 11.

[a] "Stertimus, indomitum quod despumare Falernum
Sufficiat."—Sat. iii.

nor could I, if I would; being, in this respect, like one who delights in Falernian wine, but chooses neither that which is so new as to date from the last consuls, nor that which is so old as to take the name of Annician, or Opimian. Yet the wines so entitled are, I believe, in the highest repute: but excessive age neither has the suavity which we require, nor is it even bearable[b]." The same writer, supping one evening with DAMASIPPUS, had some indifferent wine presented to him, which he was pressed to drink, "as being Falernian forty years old." On tasting it, he pleasantly observed, "that it bore its age uncommonly well[c]."

Among our present wines, I have no hesitation in fixing upon those of Xeres and Madeira as the two to which the Falernian offers the most distinct features of resemblance. Both are straw-coloured wines, assuming a deeper tint from age, or from particular circumstances in the quality, or management of the vintage. Both of them present the several varieties of dry, sweet, and light. Both of them are exceedingly strong and durable wines; being, when new, very rough, harsh, and fiery, and requiring to be kept about the same length of time as the Falernian, before they attain a due degree of mellowness. Of the two, however, the more palpable dryness and bitter-sweet flavour of the Sherry might incline us to decide, that it approached most nearly to the wine under consideration: and it is worthy of remark, that the same difference in the produce of the fermentation is observable in the Xeres vintages, as that which GALEN has noticed with respect to the Falernian; it being impossible always to predict, with certainty, whether the result will be a dry wine, or a sweetish wine, resembling Paxarete. But, on the other hand, the soil of Madeira is more analogous to that of the Campagna Felice, and thence we may conclude, that the flavour and aroma of its wines are similar. Sicily, which is also a volcanic country, supplies several growths,

[b] Brut. 83. [c] MACROB. Saturnal. ii. 3.

which an inexperienced judge would very readily mistake for those of the former island, and which would, in all probability, come still nearer to them in quality, if more pains were bestowed on the manufacture. Another point of coincidence is deserving of notice. Both Xeres and Madeira are, as is well known, infinitely improved by being transported to a hot climate; and latterly it has become a common practice, among the dealers in the island, to force the Madeira wines by a process which is absolutely identical with the operation of the *fumarium*. It may, perhaps, be objected, that the influence of heat and age upon these liquors, far from producing any disagreeable bitterness, only renders them sweeter and milder, however long they may be kept; but, then, in contrasting them with the superannuated wines of the Romans, we must make allowance for the previous preparations, and the effect of the different sort of vessels in which they are preserved. If Madeira, or Sherry, but particularly the latter, were kept in earthen jars until it was reduced to the consistence of honey, there can be little doubt, I conceive, that the taste would become so intensely bitter, that, to use the expression of CICERO, we should condemn it as intolerable.

The Surrentine wines, which were the produce of the Aminean grapes, were, in like manner, of very durable quality, — "firmissima vina," as VIRGIL designates them; and, on account of their lightness and wholesomeness, were much commended for the use of convalescents. They are stated by PLINY to have been grown only in vineyards, and consequently the vines which yielded them could not have been high-trained. Their exemption from the fault of bitterness, which most of the other wines acquired by long keeping, has been stated in a former chapter: but ATHENÆUS, upon the authority of GALEN, observes, that they remained always thin and weak, and never ripened thoroughly, from the want of sufficient body. In their early state they appear to have been very harsh and sharp to the taste; and TIBERIUS used to allege

that the physicians had conspired to raise their fame, but that, in his opinion, they only merited the name of "generous vinegar." In these respects they may be compared to some of the secondary growths of the Rhine, which, though liable at first to the imputation of much acidity, will keep a long time, and continue to improve to a certain extent, but never attain the oily smoothness that characterizes the first-rate wines. The wine of Capua resembled the Surrentine[d].

Such were the wines of the Campania Felix, and adjacent hills, of which most frequent mention is made, and concerning which the fullest particulars have been transmitted. Respecting certain other growths, as the Calenum, Caulinum, and Statanum, our information is of a more imperfect nature. We only know, that the vintages of Cales are much praised by HORACE, and described by GALEN as lighter, and more grateful to the stomach, than the Falernian; while those of the latter territories are pronounced to have been little, if at all, inferior to that celebrated wine.

As the soils of the Campania of Rome partake of the same nature, and present many excellent exposures for the vine, some good wines were there produced, but none of them equal in quality to those which we have just been reviewing. The Albanum, which grew upon the hills that rise to the south, in view of the city, is ranked by PLINY only as a third-rate wine; but, from the frequent commendation of it by JUVENAL and HORACE, we must suppose it to have been in considerable repute, especially when matured by long keeping[e]. It was sweet and thick when new, but became dry when old, seldom ripening properly before the fifteenth year. The wine of Labici occupied the middle station

[d] GALEN, apud ATHEN. i. 21.

[e] "Est mihi nonum superantis annum
Plenus Albani cadus."—HOR. Carm. iv. 11.
——— "Albani veteris pretiosa senectus
Displicet."—JUVEN. xiii. 214.

between the Falernian and the Alban. The Signinum, on the other hand, is said to have been so rough and astringent, that it was chiefly used as a medicine. All these were apparently white wines.

Among the lighter growths of the Roman territory, the Sabinum, Nomentanum, and Venafranum, were among the most agreeable. The first seems to have been a thin table-wine, of a reddish colour, attaining its maturity in seven years. The Nomentan, however, which was also a delicate claret wine, but of a fuller body, is described as coming to perfection in five or six years. The wine of Spoletum, again, which was distinguished by its bright golden colour, was light and pleasant.

In the arrangement of PLINY, a fourth class of wines was formed by the Sicilian vintages. Of these the Mamertinum, which came from the neighbourhood of Messina, and is said to have been first introduced at public entertainments by JULIUS CÆSAR, was a light and slightly astringent wine; but the wines of Tauromenium, being of a similar quality, were often substituted for it. The Pollium, or Pollæum, of Syracuse, which was of the sweet class, is noticed by several authors as a first-rate wine, being the produce of a particular grape called *biblia*, probably so called from the town of Bibliæ, in Thrace. Of the wines of the south-western part of the island, whence the best growths are now supplied, I have not perceived any mention.

It is unnecessary to swell this list by reciting the names of the other wines which grew within the confines of Italy, as they seem to have been all of an inferior order, and little else can be ascertained with respect to them. In spite of the disadvantages of the climate, which we know to have been more severe in ancient than in modern times, the culture of the grape was extended to the foot of the Alps. PLINY comprehends the growths of Cæsena, Liguria, and the territory of Verona, among the generous wines; and those of Tuscany are noticed by several authors; but we have already seen, that the produce of the vineyards to the north of

the Campania Felix was, for the most part, of a light, and less durable nature, than what was obtained from the southern districts; and we may therefore conclude, that the wines above alluded to must have belonged to the same class. The Romans, however, were not content with the supply which they derived from their own territory, but sought to increase the variety of their liquors, by importing those of the subject provinces. Gaul and Spain, in particular, furnished them with several esteemed wines, and the vintages of the islands of the Archipelago administered to the luxury of the inhabitants of Latium[f]. Of the Gallic wines, those of Dauphiny, Marseilles, and Narbonne, appear to have enjoyed the highest credit; and the produce of the violet-scented grape of Vienne, and the rich muscat of Languedoc, were well known: but most of the other growths of these countries which attained any degree of celebrity, soon fell into disrepute, from the injudicious employment of the fumarium, and from the numerous adulterations practised by the dealers, in order to cover the defects of flavour and colour[g]. The Spanish wines, on the other hand, were, in general, characterized by their strength[h]: those of Tarragona are commended by Martial and Silius Italicus as rivalling the best Tuscan vintages, and as scarcely inferior to the growths of the Campania[i].

[f] "Itaque in hoc Latio et Saturnia terra, ubi dii cultus agrorum progeniem suam docuerant, ibi nunc ad hastam locamus, ut nobis ex transmarinis provinciis advehatur frumentum, ne fame laboremus: et vindemias condimus ex insulis Cycladibus ac regionibus Beticis Gallicisque."—Colum. in Præf.

[g] "De reliquis in Narbonnensi genitis asseverare non est; quoniam officinam ejus rei fecere, tingentes fumo, utinamque non et herbis, ac medicaminibus noxiis. Quippe etiam aloën mercantur, qua saporem coloremque adulterant."—Plin. Hist. Nat. xiv. 6.

[h] "Fallitur et multo custodis cura Lyæo;
Illa vel Hispano lecta sit uva jugo."—Ovid. Art. Amat. iii. 645.

[i] "Tarraco, Campano tantum cessura Lyæo,
Hæc genuit Tuscis æmula vina cadis."—Mart. Ep. xiii. 118.

——— "Dat Tarraco pubem
Vitifero, et Latio tantum cessura Lyæo."—Sil. Ital. iii. 370.

Of the great abundance of wine among the ancient Romans, the liberal supply which Cato, notwithstanding his extreme frugality, prescribes for his farm-servants, may perhaps afford some notion. "After the vintage is finished," he says, "let the family drink the *lora* during the first three months. In the fourth month the allowance of wine may be one *hemina* daily, or, altogether, three *congii*, for each individual: in the fifth, sixth, seventh, and eighth months, one *sextarius* daily, or, in each month, five congii: in the ninth, tenth, eleventh, and twelfth months, three heminæ daily, that is, at the rate of one amphora in the month. During the Saturnalia and Compitalia the quantity may be increased to a *congius* in the day. On the whole, we may reckon the annual consumption of each man at eight amphoræ: but to the slaves in fetters we must give rather more, in order that they may perform their work. For them we may consider the allowance of ten amphoræ (68 gallons) in the year as by no means immoderate[k]."

This, however, only shows the plenty of the weak common wines, which, as a beverage, were probably scarcely equal to our table-beer. But the progress of luxury, and the extension of commerce, led to a similar profusion of the more costly kinds. Thus Varro relates, "that Lucullus, when a boy, never saw Greek wine presented to the guests oftener than once at any of the great entertainments given by his father: but when he returned from his Asiatic expedition, he himself distributed upwards of a hundred thousand gallon casks (*cadûm congiariorum*). C. Sentius, late prætor, used to say, that Chian wine was first introduced into his house as a cordial prescribed to him by his physician: Hortensius left upwards of 10,000 casks of it to his heir[l]." Some of the commentators, in their remarks on this passage, have exerted their ingenuity in magnifying the amount of the wine distributed on such occasions. Instead of the words "cadûm congiariorum,"

[k] De Re Rustica, 57. [l] Plin. Hist. Nat. xiv. 14.

G. Agricola and Harduin read "cadûm *congiarium*," which would signify a gift of so many thousand casks, or amphoræ; but, if we suppose the *cadus* to have been of the full quadrantal measure, which is a moderate estimate, as the writers alluded to have not scrupled to reckon it at ten, or even twelve congii, this would raise the total amount to 11,250 hogsheads; while, according to the other mode of computation, it would be little more than 1405 hogsheads, which certainly is the more credible estimate of the two. Pliny, in describing Cæsar's great liberality, distinguishes the amphora from the cadus; observing that, on the occasion of his triumphal supper, when dictator, he gave amphoræ of Falernian, and cadi of Chian wine[m]. That the congiarium, however, did not always import so much as a full gallon measure, may be inferred from the jest concerning the congiaria of Augustus, which, on account of their smallness, used to be termed *heminaria*[n]. Instead of the word 'cadus,' let us adopt the English term *bottle*, and we shall then have 100,000 quarts, or upwards of 400 hogsheads, of Chian wine; which, even for a person of such prodigality as Lucullus, must be acknowledged to have been a very liberal distribution of foreign wine to the populace of Rome.

[m] Hist. Nat. xiv. 15.

[n] "Fabius Maximus incusans Augusti congiarorum, quæ amicis dabantur, exiguitatem, heminaria esse dixit."—Quintilian. vi. iii.

CHAPTER VII.

OF THE METHODS EMPLOYED FOR DILUTING AND COOLING THE ANCIENT WINES.

AMPHICTYON is reported to have issued a law, directing that pure wine should be merely tasted at the entertainments of the Athenians; but that the guests should be allowed to drink freely of wine mixed with water, after dedicating the first cup to JUPITER the Saviour, to remind them of the salubrious quality of the latter fluid. However much this excellent rule may have been occasionally transgressed, it is certain that the prevailing practice of the Greeks was to drink their wines in a diluted state. Hence a common division of them into πολύφοροι, or strong wines which would bear a large admixture of water, and ὀλιγόφοροι, or weak wines which admitted of only a slight addition. To drink wine unmixed was held disreputable; and those who were guilty of such excess were said to act like Scythians,—ἐπισκυθίσαι. To drink even equal parts of wine and water, or, as we familiarly term it, half and half, was thought to be unsafe: and, in general, the dilution was more considerable; varying, according to the taste of the drinkers, and the strength of the liquor, from one part of wine and four of water, to two of wine and four, or else five parts of water,—which last seems to have been the favourite mixture. From the account which HOMER gives of the dilution of the Maronean wine with twenty measures of water, and from a passage

in one of the books ascribed to HIPPOCRATES, directing not less than twenty-five parts of water to be added to one part of old Thasian wine[a], some persons have inferred, that these wines possessed a degree of strength far surpassing any of the liquors with which we are acquainted in modern times, or of which we can well form an idea. But it must be remembered, that the wines in question were not only inspissated, but also highly seasoned with various aromatic ingredients, and had often contracted a repulsive bitterness from age, which rendered them unfit for use till they were diffused in a large quantity of water. If they had equalled the purest alcohol in strength, such a lowering as that above described must have been more than enough; but the strong heterogeneous taste which they had acquired would render further dilution advisable; and, in fact, they may be said to have been used merely for the purpose of giving a flavour to the water. In the instance cited from HIPPOCRATES' works, the mixture with Thasian wine is prescribed for a patient in fever, and can therefore be regarded as nothing more than a mild diluent drink.

Since water, then, entered so largely into the beverages of the ancients, neither labour nor expense was spared to obtain it in the purest state, and to ensure an abundant supply from those fountains and streams, which were thought to yield it of the most grateful and salubrious quality. It is related of PTOLEMY PHILADELPHUS, that, after the marriage of his daughter with ANTIOCHUS, king of Syria, he caused her to be constantly provided with water from the Nile, in order that she might not have occasion to drink any other: and the king of Persia, as we learn from HERODOTUS, would use only that of the river Choaspes; and, in all his journeys and expeditions, part of his equipage consisted of a number of four-wheeled waggons, drawn by mules, and bearing a quantity of this water, which was preserved in silver vessels, having been

[a] Τοῦτο δὲ θάσιον οἶνον παλαιὸν πέντε καὶ εἴκοσιν ὕδατος καὶ ἕνα οἴνου δίδου.
De Morb. iii. 30.

previously boiled[b]. The exertions of the Romans to procure a liberal distribution of this necessary of life are well known. They were not content, like modern nations, to fill their cisterns from a muddy river, or a putrid canal; but they sought for the choicest springs, and conveyed the waters of them, often from a great distance, clear and uncontaminated, into their cities, by means of those majestic aqueducts, of which the ruins strike us with astonishment, and must always be regarded as among the noblest monuments of ancient art. Of these, the *Aqua Marcia*, so called from Ancus Marcius, who first brought it to Rome, was held in peculiar estimation, on account of its extraordinary freshness and purity[c], and appears to have been preferred by the Romans to all others, for the purpose of diluting their wines[d].

In order more effectually to dissolve those wines which had become inspissated by age, the water was sometimes purified by boiling; and, when the solution was completed, the liquor was strained through a cloth, in order to free it from any impurities which it might have contracted[e]. As this operation, however, was apt to communicate an unpleasant taste, or at least to deprive them of their natural flavour, such persons as were nice in the management of their wines adopted the expedient of exposing them to the night air, which was thought to assist their clarification, without impairing their other virtues[f]. That the liquors which had under-

[b] Herod. Histor. Clio. (Ed. Wesseling, p. 89.) During the progress through his dominions which the late king of Spain made in the summer of 1802, all the water used at the royal table was carried on mules from Madrid, to as great distances, even, as Barcelona and Badajos.

[c] "Clarissima aquarum omnium in toto orbe, frigoris salubritatisque palma præconio urbis, Marcia est, inter reliqua Deorum munera urbi tributa."—Plin. Hist. Nat. xxxi. 3.

[d] "Temperat annosum Marcia lympha merum."—Tibull. Eleg. ii. 7.

[e] ——— "ut liquidum potet Alauda merum,
Turbida sollicito transfundere Cæcuba sacco."—Mart. Ep. xii. 61.

[f] "Massica si cœlo supponas vina sereno,
Nocturna, si quid crassi est, tenuabitur aura,
Et decedet odor nervis inimicus; at illa
Integrum perdunt lino vitiata saporem."—Hor. Sat. ii. 4.

gone these processes would be rendered more potable and grateful than before, may be readily conceived: but I am not prepared to fall in with the opinion of Bacci, who pronounces them to have been superior in colour, in brightness, and in richness, to our modern Malmsies, and other sweet wines[g]. Such methods were by no means calculated to enhance any one of these qualities in good wine; and it is obvious, that the repeated transfusions and changes of temperature must have tended to deaden and dissipate a great portion of the aroma, on the retention of which the excellence of all wines so materially depends.

As the wines thus diluted were frequently drunk warm, hot water became an indispensable article at the entertainments of the ancients. We find Lucian describing a supper, at which wine, and water, both hot and cold, were placed on a side-table for the accommodation of the guests[h]: in general, however, the latter was filled out to them, when called for, by the attendants[i]. Whether the Greeks and Romans were in the habit of taking draughts of hot water by itself at their meals, is a point which, though of no great importance, has been much discussed by antiquarians, without ever being satisfactorily determined. Freinsheim, Butius, and others, who have compiled express treatises on the subject of ancient drinks, adduce a long line of authorities in support of the affirmative side of the question[k]; but most of the passages on which they rely are, at best, of equivocal interpretation. When we find the guests at an entertainment, or the interlocutors in an ancient drama, calling for hot and tepid water (θερμὸν καὶ μετάκεραν)[l],

[g] De Naturali Vinorum Historia, Romæ, 1596, p. 92.

[h] Τράπεζα δὲ τῇ κλίνῃ παρειστήκει, ποτήριον ἔχουσα, καὶ οἶνος αὐτοῦ παρέκειτο, καὶ ὕδωρ ἕτοιμον καὶ ψυχρὸν καὶ θερμόν.—In Asino, 7.

[i] ——— "Quando ad te pervenit ille,
Quando vocatus est, calidæ gelidæque minister."—Juvenal, Sat. v.

[k] See Gronov. Thesaur. Antiquit. Græcar. Tom. IX. Grævii Thesaur. Antiq. Roman. Tom. XII. Gebauer de Caldæ et Caldi apud Veteres Potu. Lipsiæ, 1721, &c.

[l] Conf. Athenæus, iii. 35.

it does not follow, that this was to be drunk unmixed; the water so required might be merely for diluting their wines, or for the purposes of ablution. And although PLEISTONICUS, with the view of obviating the injurious effects of wine, may have enjoined, that, during the winter season at least, draughts of hot water should be previously swallowed[m]; yet there exists no evidence to show, that his counsel was much relished by his countrymen, or that the practice ever generally obtained. On the contrary, there is reason to believe, that the habitual use of such mawkish potations was confined to those who took them as a remedy for the disagreeable consequences of their debauches, or to persons of an infirm state of health, for whom they were directed as an article of regimen; as may have been the case with the prosing pleader whom MARTIAL describes as speaking against time, and refreshing himself with frequent draughts of tepid water in the intervals of his speech; and whom he advises to drink the water of the clepsydra, and thus put an end to his harangue and his thirst together[n]. That the prescription was not always followed from choice, may be seen from those lines of the same poet, in which he expresses his loathing of hot water, and his joy at the prospect of a speedy return to liquors of a more grateful temperature[o]. So far, indeed, was mere hot water from being considered a luxury by the Romans, as some have absurdly imagined to be the fact, that we find SENECA speaking of it as fit only for the sick, and as quite insufferable to those who were accustomed to the delicacies of life[p].

[m] ATHENÆUS, ii. 6. [n] Epig. vi. 35.

[o] "Setinum, dominæque nives, densique trientes,
Quando ego vos, medico non prohibente, bibam?
* * * * * *
Et potet calidam, qui mihi laudat, aquam."—Ep. vi. 86.

[p] "Quid tibi mali factum est? Cœnabis tanquam æger: imo aliquando tanquam sanus. Sed omnia ista facile perferemus, sorbitionem, aquam calidam, et quidquid aliud intolerabile videtur delicatis et luxu fluentibus, magisque animo quam corpore morbidis."—Epist. 78.

In certain conditions of the stomach, however, as in that which arises from too free indulgence in the pleasures of the table, or from the use of gross and indigestible food, it cannot be denied, that hot water will allay the uneasy feelings more effectually than cold; and, as the Romans were notorious for their intemperance in eating, we shall probably find in this circumstance the true explanation of their frequent calls for that sort of beverage. The same usage, originating, no doubt, from the same causes, existed in France during the middle ages. In the ancient monasteries, as we learn from St. Bernard, when the vintage had failed, it was customary to serve hot water to the monks instead of wine; and in the time of Champier, who wrote at the commencement of the sixteenth century, the passion for hot drinks prevailed very generally among all classes of people[q].

As the Romans lived much in public, and but few had the necessary conveniencies for keeping a stock of wine in their dwellings, persons of moderate fortune were supplied with a cask or amphora, as they wanted it, from one of the public repositories (*horrea*), where wines of all ages and qualities were to be had. When Horace was enjoying the retirement of his Sabine farm, he laments that he could only treat his guests with such light wine as the country afforded[r]; but, when he mixed in the gaieties of Rome, he seems to have made frequent purchases of the more costly kinds[s]; and on such occasions his muse commonly appears

[q] Histoire de la Vie Privée des François; par Le Grand d'Aussy, (2me Ed.) Tom. II. p. 323.

[r] "Vile potabis modicis Sabinum,
Cantharis," &c.—Carm. i. 20.

[s] "Quo Chium pretio cadum
Mercemur, quis aquam temperet ignibus?"—Carm. iii. 19.

"Nardi parvus onyx eliciet cadum,
Qui nunc Sulpiciis adcubat horreis,
Spes donare novas largus, amaraque
Curarum eluere efficax."—Carm. iv. 12.

in her most sportive mood; evincing, what he himself affirms to have been the case, that his numbers flowed more freely when he indulged in draughts of a purer and more generous quality. In like manner, such of the citizens as had no regular establishment were dependent for their daily supply of hot water on the *thermopolia*, or public houses, in which all kinds of prepared liquors were sold[t]. These places of entertainment, which were frequented in much the same way as our modern coffee-houses, appear to have existed in considerable number, even during the republic, as we meet with frequent allusions to them in the comedies of Plautus. In the reign of Claudius they attracted the attention of the government, having probably become obnoxious by the freedom of conversation which prevailed in them; for an edict was issued, ordering the suppression of taverns where people met together to drink, and forbidding the sale of hot water and boiled meats under severe penalties[u]. This mandate, however, like many of the other arbitrary acts of that emperor, would seem to have been little regarded, and was probably soon repealed; for, in a subsequent age, we find Ampelius, the prefect of Rome, subjecting these places of public resort to new regulations, according to which they were not allowed to be opened before ten o'clock of the forenoon, and no one was to sell hot water to the common people. But it is evident, that the rage for warm drinks continued as prevalent as ever; for the historian who relates the above-mentioned circumstance observes in another place, when speaking of the luxurious habits and capricious conduct of the higher ranks, that, "when they have called for hot water, if a slave has been tardy in his obedience, he is instantly chastised with three hundred lashes: but should the same slave commit a wilful murder, the master will

[t] "Pseud. Quid si opus sit, ut dulce promat indidem, ecquid habet? Char. Rogas?
Murrhinam, passum, defrutum, melinum, mel quojusmodi,
Quin in corde instruere quondam cœpit thermopolium."
Plaut. Pseudolus, Act ii. Sc. 4.

[u] Dion. Hist. Roman. lx. 6.

mildly observe, that he is a worthless fellow, but that, if he repeat the offence, he shall not escape punishment[x]."

The apparatus by which water was heated to different degrees of temperature, for the purposes of bathing and drinking, has been minutely described by VITRUVIUS, SENECA, and PALLADIUS. Three copper vessels were placed, one above another, over a furnace, the lowest being for hot, the middle for tepid, and the uppermost for cold water. They were designated by the names *caldarium*, *tepidarium*, and *frigidarium;* and were so arranged and connected by tubes, that the water in the two former could be heated by the same fire: and when any portion of the contents of the caldarium was drawn off, it was immediately replaced by a corresponding quantity from the tepidarium; and what issued from the latter was, in like manner, supplied from the frigidarium[y]. The vessel for hot water was sometimes, also, called *miliarium*, probably in consequence of a peculiarity in the form; and SENECA mentions a contrivance for applying heat to it by means of spiral metallic tubes, in much the same manner as is now practised in heating baths by steam[z].

The ancients were also accustomed to have their beverages cooled and iced in various ways. Both GALEN and PLINY have described the method which is still employed in tropical climates to reduce the temperature of water, by exposing it to evaporation,

[x] AMMIAN. MARCELLIN. xxviii. 4. I have borrowed GIBBON's translation of the passage.

[y] "Ahena supra hypocaustum tria sunt componenda, unum caldarium, alterum tepidarium, tertium frigidarium: et ita collocanda, uti ex tepidario in caldarium, quantum aquæ caldæ exierit, influat; de frigidario in tepidarium ad eundem modum: testudinesque alveorum ex communi hypocausi calefacientur."—VITRUV. Architect. v. 10. These details are clear and precise; and I can discover no room for the cavils of GRÆVIUS, who labours, through three folio pages, to prove that the term 'caldarium,' from which the English word *caldron* is evidently derived, was not used, in VITRUVIUS' time to denote a vessel for heating water, but meant a heated chamber, θερμὸς οἶκος.

[z] Quæst. Nat. iii. 24.

in porous vessels, during the night time: and a simile in the Proverbs[a] seems to warrant the conclusion, that the custom of preserving snow for summer use must have prevailed among oriental nations from the earliest ages. That it was long familiar to the Greeks and Romans, is abundantly certain. When ALEXANDER the Great besieged the town of Petra, in India, he is reported to have ordered a number of pits to be dug, and filled with snow, which, being covered with oak branches, remained a long time undissolved[b]. A similar expedient is noticed by PLUTARCH, with this difference, that straw and coarse cloths are recommended instead of oaken boughs[c]. The Romans adopted the same mode of preserving the snow, which they collected from the mountains, and which, in the time of SENECA, had become an important article of merchandise at Rome, being sold in shops appropriated to the purpose, and even hawked about the streets[d]. That the modern inhabitants are still supplied with it in a similar manner, may be seen from the following observations of MR. LEMISDEN, which are the more interesting, as they point to a fact with regard to the conservation of snow, which, I believe, is by no means so generally known as it ought to be:—

"A little above Rocca di Papa (on the ancient Mons Albanus)," says that accomplished writer, "is a plain called HANNIBAL's Camp. It is here that the snow is collected annually for the use of Rome. On this dry plain they dig pits, without any building, about fifty feet deep, and twenty-five broad at the top, in the form of a sugar-loaf, or cone. The larger the pit, the snow, no doubt, will preserve the better. About three feet from the bottom they commonly fix a wooden grate, which serves for a drain, if any of the snow should

[a] "As the cold of snow in the time of harvest, so is a faithful messenger to them who send him: for he refresheth the soul of his masters."—Ch. xxv. ver. 13.

[b] CHARES MITYLEN. apud ATHEN. iii. 35. [c] Sympos. vi. quæst. 6.

[d] "Nec unum nivis est pretium, sed habet institores, et reponendæ officinas, peleisque custodiunt, inquinantque."—Quæst. Natural. iv. 13.

happen to melt, which otherwise would stagnate, and hasten the dissolution of the rest. The pit thus formed, and lined with prunings of trees and straw, is filled with snow, which is beat down as hard as possible, till it becomes a solid body. It is afterwards covered with more prunings of trees, and a roof raised in form of a low cone, well thatched over with straw. A door is left at the side, covered likewise with straw, by which men enter and cut out the ice, for such it becomes, with a mattock. The quantity daily demanded is carried to Rome, in the night time, in carts well covered with straw. It is found by experience, that snow, thus pressed down, is not only colder, but preserves longer, than cakes of ice taken from ponds or ditches[e]."

At first the only mode of employing snow was by fusing a portion of it in the wine or water which was to be cooled; and this was most conveniently effected by introducing it into a strainer (*colum nivarium*), which was usually made of silver, and pouring the liquor over it. But as the snow had generally contracted some degree of impurity during the carriage, or from the reservoirs in which it was kept, the solution was apt to be dark and muddy[f], and to have an unpleasant flavour from the straw: hence those of fastidious taste preferred ice, which they were at pains to procure from a great depth, that they might have it as fresh as possible[g]. A more elegant method of cooling liquors came into vogue during the reign of NERO, to whom the invention was ascribed; namely, by placing water, which had been previously boiled, in a thin glass vessel surrounded with snow, so that it might be frozen without having its purity impaired[h]. It had, however, been long a prevailing opinion among the ancients, as we may

[e] Remarks on the Antiquities of Rome and its Environs, p. 464.

[f] "Et faciant nigras nostra Falerna nives."—MART. Epig. ix. 23.

[g] SENECA, Quæst. Natural. iv. 13.

[h] "Neronis principis inventum, decoquere aquam, vitroque demissam in nives refrigerare: ita voluptas frigoris contingit sine vitiis nivis."—PLIN. Hist. Nat. xxxi. 3.

collect from ARISTOTLE, GALEN, and PLUTARCH, that boiled water was most speedily converted into ice; and the experiments of modern chemists would seem to prove, that this doctrine was not altogether without foundation. At all events, the ice so obtained would be of a more compact substance than that procured from water which had not undergone the process; and this was sufficient to justify the preference.

It is curious to remark, especially when we consider the character of the age in which they were written, the loud lamentations of SENECA with respect to this very natural and harmless species of luxury. "To what a pitch," he exclaims, "have our artificial wants brought us, that common water, which nature has caused to flow in such profusion, and destined to be the common beverage of man and other animals, should, by the ingenuity of luxury, be converted into an article of traffic, and sold at a stated price!—The Lacedemonians banished perfumers from their city and territory, because they wasted their oil. What would they have done, if they had seen our shops and storehouses for snow, and so many beasts of burthen employed in carrying this commodity, dirtied and discoloured by the straw in which it is kept?—You may behold certain lean fellows, wrapped up to the chin to defend them from the cold, and pale and sickly in appearance, who not only drink, but even eat snow, putting lumps of it into their cups during the intervals of drinking. Do you imagine this to be thirst? It is a true fever, and of the most malignant kind[1]." Even PLINY is disposed to grudge his cotemporaries this simple indulgence. "Some persons," he says, "drink snow, others ice; rendering, in this way, the hardships of the mountainous regions subservient to the gratification of the palate: and cold is preserved during summer, in order that they may ice their cups, notwithstanding the warmth of the season. Some boil the water first, and then freeze it. In short, man is

[1] Quæst. Natural. iv. 13.

satisfied with nothing in the state that he receives it from the hand of nature[k]." These declamations, however, passed unheeded; the usage in question became universal, as the frequent allusions to it by ancient authors sufficiently prove: nor was it confined to the summer months, but was continued by many through the depth of winter[l]; as is still the case in the south of Italy and in Sicily, where iced water has become an article of prime necessity, and is sought for, at all seasons, with an avidity which, to a native of our northern clime, appears, at first view, quite unaccountable. "It is from a volcano," Dr. Irvine observes, in his Letters from the latter country, "that the inhabitants are abundantly supplied with this refreshment. The noise and tumult at the houses where the snow is sold, as fast as it arrives from Etna, is even alarming to a stranger; and I thought, the first time, that nothing less than murder could have occurred within, seeing the doors besieged by so clamorous a mob. When the thermometer is at 88° of Fahrenheit in the shade, there is something in this eagerness which we can understand: but in this country, when snow is lying on the ground, when cold and damp winds send one shivering for shelter, even then the Sicilian must have his iced water. There is no weather so cold as to drive him from his wonted refreshment. He seems as if resolved to make the greater cold expel the less."

[k] Hist. Natural. xix. 4.

[l] "Itaque non æstate tantum, sed et media hieme nivem hac caussa bibunt."—Seneca, loc. cit.

CHAPTER VIII.

OF THE USE OF WINE AT THE BANQUETS OF THE GREEKS AND ROMANS.

THE Greeks, though a highly polished people, and living in a temperate climate, are generally reproached with their love of wine; and their parties of pleasure have been stigmatized by some authors as little else than mere drinking-matches. But the charge must be received with considerable allowances. They were acquainted with the culture of the vine from a very early period; their soil was exceedingly propitious to its growth; and luxury had made great progress among them at a time when the manners of the Romans retained their pristine simplicity. Hence we find, in their older writers, more frequent mention of their convivial excesses, and more particular allusions to the wines which they drank, than are to be found in the cotemporary authors of Rome. Yet, although they may have often violated the laws of temperance, they were studious to preserve a certain degree of decorum in their feasts, and seldom gave into such gross debauches as disgraced the Roman name under the emperors. When they drank freely, their wine was much diluted: to use it otherwise was held to be a proof of barbarism, as has been already observed. In one respect, there was a remarkable contrast between the customs of the two nations: the Romans allowed their women to mix in their festive meetings, but forbade them the use of wine; while the Greeks permitted them to drink wine, but excluded them from all entertainments at which any but near relations were present. At the banquets

of the heroical ages, however, the females of the family occasionally appeared, performing the functions of cup-bearers, and other menial offices.

When HOMER wrote, there seems to have been but little variety in the entertainments of his countrymen. Roast beef was the ordinary fare of the heroes of the Iliad and Odyssey; and it was held no degradation to them to kill their own meat, and dress their own dinners: no fish, no poultry, no made dishes, appeared on their boards; probably because such delicacies were not thought to afford sufficiently solid nourishment, or were accounted unseemly to persons inured to fatigue, and braving all kind of hardships. At the court of ALCINOUS, even, who was notorious for his luxury, and whose palace was profusely adorned with gold, and silver, and tapestry of varied dyes, the materials of the feast consisted of beeves, and boars, and sheep; and at the nuptials of the son and daughter of MENELAUS, a chine of beef was presented to TELEMACHUS, by way of distinction. In the course of time, as commerce extended, and the arts of life advanced, the entertainments of the Greeks became conspicuous for the multiplicity of dishes, as well as for the skill and refinement displayed in the preparation of them. The gratification of the palate, which before was deemed unworthy of serious thought, now grew to be a matter of infinite consequence; voluminous treatises were composed on the subject; and poets and philosophers contended for the prize in this novel department of literature. ARCHESTRATUS of Syracuse, who explored every land and sea solely, as ATHENÆUS alleges, for the purpose of studying the art of good living, digested the materials he had thus collected into an epic poem, under the title of 'Gastronomy,' of which various fragments have been preserved: and TIMARCHIDES of Rhodes enlightened his countrymen by a work of eleven books, or upwards, on the same topic. A complete Art of Cookery, beginning with truffles and ending with tunny fish, was furnished by PHILOXENUS of Cythera, the prototype of some noted epicures of modern times, who prayed

for the neck of a crane in order to prolong his pleasures; and who, when he dined abroad, was attended by pages, carrying oil, vinegar, and other sauces, to season the dishes of which he might be invited to partake. Even ARISTOTLE is said to have applied his talents to the compilation of a code of laws for the table, and to have been known among his cotemporaries as a lover of fish. Nor, extravagant as they may often appear, were the boasts of the culinary artists of those days altogether vain: for the ample detail of their performances, which has been handed down to us by the author of the 'Deipnosophistæ,' shows, that they left but little for the inventive genius of their successors to accomplish.

A revolution similar to that which has marked the progress of luxury in recent times, occurred in ancient Greece and Rome, with respect to the hours of the principal meals. Originally the δεῖπνον and *cœna* divided the day: but when the pleasures of the table had become an important part of the business of life, they were deferred till the afternoon, or evening, in order that they might less interfere with the more serious avocations of the guests. The morning repast was reduced, and the dinner usurped the place of the supper. With those who lived luxuriously, this meal was usually preceded by a collation (πρόπομα, *promulsis*, *antecœna*), at which various light foods, such as oysters, eggs, asparagus, lettuce, olives, figs, &c. were presented, and *mulsum*, or a mixture of wine and honey, was drunk[a]. Then came the first course, consisting of

[a] "Ante cœnam," says MACROBIUS, in the description which he quotes of the inauguration supper of LENTULUS, "echinos, ostreas crudas quantum vellent, peloridas, sphondylos, turdum, asparagos, &c."—Saturnal. ii. 9. Traces of this usage are still observable. Thus, at the well-furnished tables of France, as we learn from the author of the 'Manuel des Amphitryons,' "les huîtres, soit à déjeûner, soit à dîner, se mangent toujours avant le premier service, et même avant la soupe. C'est l'*introït* de tous les repas:" and, in Italy, the dinner is frequently ushered in by dishes of figs, Bologna sausages, &c. The *coup d'avant* of *wermuth*, or sweet wine compounded with wormwood and other aromatic herbs, which is customary in some countries, may be regarded as equivalent to the draught of *mulsum*.

the more substantial dishes; and this, again, was followed by the dessert, at which pastry, fruit, and other delicacies invited the appetite, and the stronger wines were put into circulation.

When, in imitation of the Asiatic nations, the practice of reclining at their meals was adopted by the Greeks and Romans, great magnificence was displayed in the fashion of the couches. The frames were inlaid with ivory, tortoise-shell, or the precious metals; the feet being formed of solid ivory, or bronze, and the coverings of purple cloth, enriched with embroidery. Some had couches made of solid silver, and even golden beds were not unknown. To render the appearance more imposing, they were occasionally elevated to such a height, that steps became necessary in order to ascend them. The tables, in like manner, which had been at first of maple or fir, were now constructed of citron and other rare woods, resting upon carved ivory feet, and having a circle of silver or gold around the edge. The sideboards, or repositories of plate (κυλικεῖα, *abaci*), were made of similar materials, and ornamented in a similar style.

Of the Greek artists it may, in truth, be affirmed, that they embellished every thing which they touched. To the commonest utensils they gave not only the most convenient forms, but a high degree of beauty; and it is from their pateræ, cups, and vases, that the moderns have borrowed the happiest models for the furniture of their dinner-tables. Their inventive talents appear to have been constantly exercised in gratifying the taste for variety in drinking vessels, which prevailed among all ranks of people, and which all sought to indulge according to their means;—the rich by forming large collections of cups, on which the sculptor, lapidary, and jeweller had displayed the perfection of their skill,—the poor by having their ivy and beechen bowls so curiously carved, that the beauty of the workmanship compensated for the meanness of the materials[b]. Even

[b] ———— "Pocula ponam
Fagina, cœlatum divini opus Alcimedontis," &c.—VIRG. Bucol. iii. 36.

in the heroic ages, vessels of gold and silver, chased and decorated with various devices, could not have been uncommon; since several cups of this description are mentioned by HOMER, which, from their magnitude, as well as the elegance of their ornaments, would have excited admiration in later times. Such was the goblet of NESTOR, which is described as studded with gold, having a double bottom, and four golden handles, each terminating in two doves embossed in gold, and so massive withal, that, when full, no person of his years save himself could lift it[c]; — such the well-wrought silver bowl with a rim of gold, which TELEMACHUS received from MENELAUS at his departure from the Spartan court[d]; — and such the golden cup of ACHILLES, from which he alone drank, and poured his solemn libations[e]. Of the profusion of plate among the Greeks and Romans in later ages, we may form some idea from the fact, that, at the entertainments of the great, the master of the feast occasionally presented his guests with the gold or silver cups in which they had been served with wine[f]. Many persons, as has been already hinted, carried their luxury so far as to have their goblets richly bedecked with gems[g]; and those who could not afford other ornaments of the kind transferred the stones from their rings[h].

Athens claimed the invention, and took the lead in the manufacture of earthenware vases: but the potteries of Samos soon rose into equal repute, and, with those of Saguntum in Spain, and Surrentum, Arretium, and one or two other towns in Italy, furnished the chief supply. They were formed of the purest clay, and distinguished by their extraordinary lightness. To render them

[c] Il. xi. 631. [d] Od. xv. 115. [e] Il. xvi. 225.

[f] ATHENÆUS, xi. 3. — JUL. CAPITOL. in Vero, 5.

[g] "Turba gemmarum potamus, et smaragdis teximus calices; ac temulentiæ causa tenere Indiam juvat: et aurum jam accessio est." — PLIN. Hist. Nat. xxxiii. 1.

[h] "Nam Virro, ut multi, gemmas ad pocula transfert
A digitis." — JUV. v. 43.

impervious, they were coated with a varnish of bitumen, which admitted of a fine polish, and was, besides, very durable; and they were sometimes also imbued with aromatic substances, which imparted a grateful perfume to the liquor drunk out of them[i].

It is probable that the horns of animals served as the first drinking cups among most nations; those of the urus especially being esteemed on account of their large capacity, and, when tipped or lined with gold or silver, being thought not unbecoming on the tables of kings[k]. The form was retained in the earliest earthenware vessels; and, as luxury advanced, in those also which were made of the precious metals. In process of time other patterns were substituted; and before the age of Athenæus they had multiplied to such an extent, that this author was enabled to record the names and description of nearly one hundred varieties of bowls and vases, which differed more or less from one another, in size or shape, in the number or position of the handles, or in the fashion of the ornaments with which they were embellished[l].

The Egyptians were long celebrated for their works in glass: they could give to it all the clearness of rock-crystal, and were conversant with the art of gilding it and staining it of various colours; and the Alexandrians, in particular, are said to have brought the manufacture to such a degree of perfection, that they could imitate in that substance every sort of earthen vase. It was accordingly from the banks of the Nile that the Romans were supplied with wine-glasses, of which the use must have become very general in the capital, as we meet with several allusions in the poets to the frequent breaking of them by those who drank their wine mixed with hot water, and to the practice of trucking the broken glass for sulphur matches[m]. Such as affected great state

[i] Athenæus, xi. 3. [k] Ibid. c. 7. [l] Ibid. c. 3—15.

[m] "Quæ sulphurato nolit emta ramento
Vatiniorum proxeneta fractorum."—Martial. Epig. x. 3.

despised what had grown so cheap, and drank only from cups of gold[n].

The triumphs of POMPEY brought the Romans acquainted with a new species of vases, called *murrhine* from the substance of which they were made. They were highly prized, and, though at first dedicated to the service of the gods, afterwards came into common use among the wealthy and luxurious. Concerning the nature of these vases the opinions of antiquaries are exceedingly vague and unsatisfactory. That they were formed from a natural fossil, and not an artificial paste resembling porcelain, as CARDAN, CAYLUS, and MARIETTE have surmised, is evident from the statement of PLINY, that it was dug from the earth, like rock-crystal. That it could not be onyx, as AGRICOLA imagines, or a variegated agate or sardonyx, as WINCKELMANN, MILLIN, and others have maintained, appears from the circumstance related by the same author, with respect to a certain murrhine bowl that held three sextarii, and was valued at 80,000 sestertii, or 640 pounds of our money. Its possessor, a person of consular rank, was so fond of using it, that the edge of it bore the marks of his teeth: yet these marks rather enhanced the value than otherwise, as they served to show the genuineness of the stone. Nor does the supposition of COUNT VON VELTHEIM, that they were vessels of agalmatolite, accord any better with the colour and other external properties of the mineral in question. "It is from the east," says PLINY, "that the murrhine vases come to us. The stone from which they are manufactured is found there in several places of little note, principally in the Parthian kingdom, but, above all, in Karamania. The blocks of it are never of larger size than is sufficient for shaping into small trays, and in thickness rarely admit of the formation of such a cup as that above-mentioned. It has a certain degree of lustre without the brilliancy of the precious gems; but is chiefly valued for its variegated colours,

[n] "Bibit (GALIENUS) in aureis semper poculis, aspernatus vitrum, dicens, nil esse eo communius."—TREBELL. POLL. Galieni duo, c. 17.

and its zones of purple and white, and yellowish red,—passing into each other, and refracting the light. That which shows the broadest or closest veins is preferred: transparency, or paleness of colour, is reckoned a defect. Much of the beauty also consists in the tubercles and crystals which are imbedded in its substance: and it is further distinguished by its perfume[o]." From this description M. DE ROZIÈRE has inferred, and, I think, succeeded in proving, that the murrhine vases must have been formed of fluor-spar[p], a fossil which is found in most regions of the globe, and the only one to which all the characters above enumerated will apply. In addition to the facts which he has collected in support of his argument, it may be observed, that the common method of changing the colour of fluor-spar from a violet blue to a light purple or reddish colour, is by exposing it to the tempered heat of a furnace: and this seems to afford the true explanation of the line of PROPERTIUS[q], which has been held to sanction the conjecture, that the murrhine vases were analogous to our porcelain. It is also worthy of remark, that the last polish of fluor-spar is given with mastic, which will account for the odour which PLINY supposed to belong to the native mineral, and which was thought to improve the flavour of the wine when drunk from cups of that substance[r]. A spurious kind of these vases was supplied from Thebes, in Egypt, probably an imitation in paste of the genuine vases: and in most collections of antiquities there may be seen specimens of vessels in blue or purple glass, with zig-zag belts of white, yellow, and light blue, evidently copied from the crystalline veins of fluor-spar.

At the banquets of heroic times each guest had a separate cup;

[o] Hist. Natural. xxxvii. 2.

[p] Mémoire sur les Vases Murrhins; par M. DE ROZIÈRE, Ingénieur en Chef au Corps Royal des Mines.—*Journal des Mines*, Septembre, 1814.

[q] "Murrheaque in Parthis pocula cocta focis."—Lib. IV. v. 26.

[r] "Si calidum potas, ardenti murrha Falerno
Convenit, et melior fit sapor inde mero."—MARTIAL. Epig. xiv. 113.

and larger cups and purer wine were presented to the chiefs, or those friends whom the master of the feast desired to honour[s]. It was also a mark of respect to keep their cups always replenished, that they might drink as freely and frequently as they inclined. The wine, which had been previously diluted to the requisite standard in a separate vessel (κρητὴρ, ψυκτὴρ), was served by the attendants, who were either the heralds of the camp, or boys retained for that purpose. Besides these cup-bearers, the wealthy Athenians had their butlers, or inspectors of the wine (οἰνόπται), whose business it was to watch the movements of the table, and see that all the guests were properly supplied[t]. At the conclusion of the dinner, pure wine was handed round: but, before it was drunk, a portion of it was poured upon the ground or table, as an oblation to JUPITER and all the gods, or to some one deity in particular; and the cup was always filled to the brim, as it was held disrespectful to offer any thing in sacrifice but what was full and perfect. Hence the goblets were said to be crowned with wine[u]. The wine used on these occasions was of the red sweet class, probably because it was the richest and strongest, or was the customary dessert-wine. It may be remarked, that the same kind of wine is still employed for sacramental purposes; and the appellation of *vino santo*, which is given by the Italians to their most luscious growths, is probably allusive to this circumstance.

Analogous to these libations was the custom, which afterwards came to prevail at the Grecian festivals, of dedicating successive cups to particular divinities. Thus the first cup of pure wine was sacred to BACCHUS, under the name of the Good Genius (Ἀγαθοῦ δαίμονος); the second belonged to JUPITER the Saviour, and

[s] Μείζονα δὴ κρητῆρα, Μενοιτίου υἱὲ, καθίστα,
ζωρότερον δὲ κέραιρε, δέπας δ' ἔντυνον ἑκάστῳ·
οἱ γὰρ φίλτατοι ἄνδρες ἐμῷ ὑπέασι μελάθρῳ.—Il. ix. 202.

[t] ATHENÆUS, x. 6.

[u] Κοῦροι δὲ κρητῆρας ἐπεστέψαντο ποτοῖο.—Od. i. 149.
Crateros magnos statuunt, et vina coronant.—VIRG. Æneid. i. 723.

consisted of a mixture of wine and water; then came the cup of Health, which was drunk when the company washed their hands; and the entertainment concluded with the cup of MERCURY, as the patron of the night, and dispenser of sleep and pleasing dreams. These ceremonies, however, were not always observed in the order just stated: they no doubt varied in the different states of Greece, and, in later ages, fell altogether into disuse[x].

Previously to the introduction of the second course, the guests were provided with chaplets of leaves or flowers, which they placed on their foreheads or temples, and occasionally, also, on their cups. Perfumes were at the same time offered to such as chose to anoint their face and hands, or have their garlands sprinkled with them. This mode of adorning their persons, which was borrowed from the Asiatic nations, obtained so universally among the Greeks and Romans, that, by almost every author after the time of HOMER, it is spoken of as the necessary accompaniment of the feast. It is said to have originated from a belief, that the leaves of certain plants, as the ivy, myrtle, and laurel, or certain flowers, as the violet and rose, possessed the power of dispersing the fumes and counteracting the noxious effects of wine. On this account the ivy has been always sacred to BACCHUS, and formed the basis of the wreaths with which his images, and the heads of his worshippers, were encircled; but, being deficient in smell, it was seldom employed for festal garlands; and, in general, the preference was given to the myrtle, which, in addition to its cooling or astringent qualities, was supposed to have an exhilarating influence on the mind. On ordinary occasions the guests were contented with simple wreaths from the latter shrub; but, at their gayer entertainments, its foliage was entwined with roses and violets, or such other flowers as were in season, and recommended themselves by the beauty of their colours, or the fragrancy of their smell. Much taste was displayed

[x] ATHENÆUS, xv. 14.—SUIDAS in voce Κρατῆρ.

in the arrangement of these garlands, which was usually confided to female hands; and as the demand for them was great, the manufacture and sale of them became a distinct branch of trade. To appear in a disordered chaplet was reckoned a sign of inebriety; and a custom prevailed of placing a garland confusedly put together (χυδάιον στεφάνον), on the heads of such as were guilty of excess in their cups[y]. Several passages of the Fabliaux show, that, so late as the twelfth and thirteenth centuries, the above-mentioned decoration of the banquet was still in vogue[z]; and, in this country, the ceremony of crowning the wassail-bowl was retained to a comparatively recent period. At present the only relics of the usage in question that I am aware of, are to be found in those wreaths of ivy or flowers, which, in some countries, serve as the signs of taverns, or houses where wine is sold.

When the richer wines were circulated, it was usual for the master of the feast, or whoever occupied the uppermost seat, to begin the round by pledging the principal guests; that is, he tasted the wine, and saluted the company, or the guest on his right hand, if a person of distinction, to whom the cup was then passed, and who was expected to finish its contents. At the banquets of the Grecian chiefs this form seems to have been religiously observed[a]; and even the gods are described by Homer as pledging one another in nectar from golden beakers[b]. When Dido entertained Æneas and his companions, she is said to have called for a capacious goblet of massive gold, profusely adorned with gems, which she filled with pure wine. Having made the due libation to Jupiter and the other divinities, she approached the wine to her lips, and then handed

[y] See Athenæus, xv. 3—13; Plutarch, Sympos. iii.—and the laborious compilation of Paschal, De Coronis, Lugd. Bat. 1671.

[z] Le Grand d'Aussy, Vie Privée des François, tom. iii. p. 286.

[a] Πλησάμενος δ' οἴνοιο δέπας, δείδεκτ' Αχιλῆα.—Il. ix. 224.

[b] ——— χρυσέοις δεπάεσσι
Δειδέχατ' ἀλλήλους.—Il. iv. 4.

it to BITIAS, who eagerly drank it off; and afterwards the bowl was offered to the other chiefs[c]. To drink in this manner was considered a proof of friendship, and the cup so presented was termed φιλοτησία κύλιξ, or a bumper glass[d]. From the manner in which the ceremony in question is spoken of by CICERO, we may infer, that, in his time, it was in a great measure confined to the Greeks; but in a subsequent age it appears to have been generally adopted by the Romans, as it is frequently noticed by their prose-writers, as well as poets.

It was also a common practice at the convivial meetings of both nations to drink to the healths of distinguished individuals, and to the absent friends and mistresses of the guests[e]; and the respect or attachment entertained for those whose names were toasted was supposed to be indicated by the greater or less number of cups which the proposer filled out to their honour. Thus, in a comedy of ANTIPHANES, we find one of the interlocutors boasting that he had emptied six hundred glasses in honour of the gods and goddesses,

[c] "Hic regina gravem gemmis auroque poposcit,
Implevitque mero pateram: ———
Primaque, libato, summo tenus attigit ore.
Tum Bitiæ dedit increpitans; ille impiger hausit
Spumantem pateram, et pleno se proluit auro.
Post alii proceres."—VIRG. Æneid. i. 728.

[d] ——— Φιλοτησίαν σοι τήνδ' ἐγὼ
Ἰδίᾳ τε καὶ κοινῇ τὴν κύλικα προπίνομεν.—ALEXIS, apud ATHEN. xi. 14.

The word *bumper*, which has strangely puzzled DR. PEGGE and other etymologists, is only a slight corruption of the old French phrase *bon per*, signifying a boon companion (see *Glossaire de la Langue Romane*). To drink a cup of good-fellowship, or bumper-health, may, therefore, be regarded as strictly synonymous with the Greek φιλοτησίαν προπίνειν.

[e] "Vultis severi me quoque sumere
Partem Falerni? dicat Opuntiæ
Frater Megillæ, quo beatus
Vulnere, qua pereat sagitta."—HOR. Carm. I. xxvii. 9.

"Sed bene Messalam sua quisque ad pocula dicat,
Nomen et absentis singula verba sonent."—TIBULL. II. i. 31.

and afterwards a double quantity to the health of the best of kings (γλυκυτάτου βασιλέως[f]). A favourite mode of drinking healths was by taking off as many cups as there were letters in the names proposed. The health of CÆSAR, for instance, was celebrated with six glasses, that of GERMANICUS with ten, and so forth[g]. Some were partial to the number of the Muses: but those who studied moderation confined themselves to that of the Graces[h].

With a view to maintain due order in the proceedings, and see that all the company drank fairly, a leader, or president of the feast (συμποσίαρχος, *arbiter bibendi*) was appointed, who was either the person at whose expense the entertainment was given, or one of the guests chosen by lot[i]. In all matters relating to the ceremonies of the table his authority was absolute, and none durst dispute his decrees as long as he remained in the company; the rule being, either to drink or to be gone—*aut bibat, aut abeat.* Alluding to this practice, CICERO remarks, in one of his pleadings

[f] ATHENÆUS, x. 6.

[g] "Nunc mihi dic, quis erit, cui te, Calatisse, deorum
Sex jubeo cyathos fundere? Cæsar erit."—MARTIAL. Ep. ix. 95.

"Hæc illi sine sorte datur, cui nomine Rhenus
Vera dedit: decies adde Falerna, puer."—Ibid. xiv. 170.

"Nævia sex cyathis, septem Justina bibatur,
Quinque Lycas, Lyde quatuor, Ida tribus."—Ibid. i. 72.

[h] "——— Tribus aut novem
Miscentor cyathis pocula commodis.
Qui Musas amat imparis,
Ternos ter cyathos adtonitus petet
Vates: tris prohibet supra
Rixarum metuens tangere Gratia,
Nudis juncta sororibus."—HOR. Carm. II. xix. 11.

[i] "——— Quem Venus arbitrum
Dicet bibendi?"—Ibid. II. vii. 25.

"Nec regna vini sortiere talis."—Ibid. I. iv. 18.

against VERRES, "that, though he had set at nought all the laws of the state, yet he was never known to violate those of the bottle[k]". In his hours of relaxation, the orator seems to have taken great delight in these social parties, where excess was restrained, and the most agreeable turn was given to the conversation, by the prudent management of the president of the day; and the temperate enjoyment of the luxuries of the table only served to promote the flow of wit, and exalt the pleasures of rational intercourse[l].

Although the fact is nowhere distinctly stated, we may collect from the general arrangement of the Grecian banquet, as well as from the commendations bestowed on those wines which were drunk in their pure state, that the more ordinary kinds were used during dinner, while the richer were reserved for the dessert. The latter, indeed, must have been always too rare and costly to be used without restraint. That the former were occasionally of a weaker quality than the guests would have wished, appears from a passage in the 'Æsopus' of ALEXIS, where SOLON is rallied on the ingenious contrivance of the Athenian wine-merchants, "who, in order to spare the heads of their customers, put it out of their power to drink unmixed wine at their meals, by selling it ready diluted from the carts[m]." The dessert-wines most commonly mentioned as in use among the Greeks are the Thasian and Lesbian: among the Romans the Cecuban, Albanian, and Falernian; and, when they had become acquainted with the produce of foreign countries, the Chian and Lesbian. But, beside this general distribution of wines at

[k] Or. in Verr. v. 11.

[l] "Me vero magisteria delectant à majoribus instituta, et is sermo qui more majorum à summo adhibetur in poculis; et pocula, sicut in symposio Xenophontis, minuta atque rorantia, et refrigeratio æstate, et vicissim aut sol, aut ignis hibernus. Quæ quidem in Sabinis etiam persequi soleo, conviviumque vicinorum quotidie compleo; quod ad mediam noctem, quam maxime possumus, vario sermone producimus."—De Senectute, 14.

[m] ATHENÆUS, x. 8.

entertainments, we find, from some verses of another comedy by the same poet, that it was not unusual to have a portion of sweet wine presented to the guests in the middle of the repast (μεταξὺ ἐσθίοντες) by a female attendant, who is represented as bearing it in a rich silver vessel, of a peculiar fashion, from which each probably drank in his turn[n].

The Romans, who borrowed most of the convivial customs of the Greeks, were, however, less scrupulous observers of forms; at least, greater liberty seems to have been allowed at their entertainments to such as chose to increase the strength of their cups: but, in general, the same order was preserved in the service of the different wines, and it was only after the lighter sorts began to pall upon the tongue, that the older and stronger kinds were produced[o].

[n] Εἰσῆλθεν ἡ ἑταίρα, φέρουσα τὸν γλυκὺν
ἐν ἀργυρῷ ποτηρίῳ πετάχνῳ τινὶ,
ἀστειοτάτῳ τὴν ὄψιν, οὔτε τρυβλίῳ
οὔτε φιάλῃ· μετεῖχε δ' ἀμφοιν τοῖν ῥυθμοῖν.—ATHENÆUS, iii. 36.

How similar, in almost every respect, the modern usage, as described by a great arbiter of convivial etiquette!—

"Il y a deux manières de servir le *coup du milieu;* ou c'est l'Amphitryon qui le verse dans de très-petits verres de cristal destinés à cet usage, et qu'il fait passer à chaque convive en commençant par sa droite: ou c'est une jeune fille de quinze à dix-neuf ans, blonde, sans aucun ornement sur la tête, et les bras nuds jusqu'au dessus du coude, qui tenant de sa main droit le porte-verres, et de l'autre la bouteille, fait le tour de la table, et sert successivement chaque convive, au-devant duquel elle s'arrête. Mais de quelque manière que le coup du milieu soit servi, il est toujours unique, et sous aucun prétexte on ne peut se dispenser de le boire."—*Manuel des Amphitryons*, p. 296. Paris, 1808.

[o] "Minister vetuli puer Falerni,
Inger mi calices amariores."—CATULL. Carm. 27.

"Capaciores affer huc, puer, scyphos,
Et Chia vina, aut Lesbia,
Vel, quod fluentem nauseam coërceat,
Metire nobis Cæcubum."—HOR. Epod. ix. 33.

In the time of HOMER, we have already seen, that the Greeks were not contented with the common wines of their country, but sought for the choicest vintages wherever they were to be obtained, preserving them with care, in order that they might be fully mellowed by age. Until a much later period of their history, however, it does not appear to have been usual to produce them in any great variety at their banquets. In general, we read of two sorts at most; and it is mentioned as an instance of unexampled luxury, that, at the nuptial feast of IPHICRATES, four or five different kinds should have been used[p]. The testimony of PLINY proves that the same was the case at Rome. On the occasion of his two first triumphs, CÆSAR distributed a large quantity of Chian and Falernian wines; but at the public entertainment given by him during his third consulate, in addition to the growths just mentioned, he presented Lesbian and Mammertine; and this, according to PLINY, was the first time "that four varieties of wine were seen upon the table at once[q]." At private parties, considerable choice seems to have been afforded to the guests. For instance, at the supper of NASIDIENUS, which probably exhibits a true picture of a Roman feast, as given by a person of bad taste who was affecting the manners of people of superior rank, after Cecuban and indifferent Chian wine had been ostentatiously handed round, the landlord is represented as observing to MÆCENAS, that Alban and Falernian were at hand, if he preferred them[r]. It was a common complaint, however, of the clients and parasites who frequented the tables of the haughty patricians, that

[p] Οἶνοι δέ σοι, λευκὸς, γλυκὺς, αὐθιγενὴς, ἡδὺς, καπνίας.—ATHENÆUS, iv. 3.

[q] Hist. Nat. xiv. 15.

[r] ——— "ut Attica virgo
Cum sacris Cereris, procedit fuscus Hydaspes,
Cæcuba vina ferens; Alcon, Chium maris expers.
Hic herus: Albanum, Mæcenas, sive Falernum
Te magis appositis delectat? habemus utrumque."—HOR. Sat. II. viii. 13.

the master of the house kept to himself the better wines, and drank out of costly cups, while they were obliged to be content with harsh and ropy liquors, served out to them in coarse and half-broken glasses[s]. Hence the expression, *vinum dominicum*[t]. "I lately supped," says the younger PLINY, "with a person, who, in his own opinion, treated us with much splendour and economy; but, according to mine, in a sordid, yet expensive manner. Some very elegant dishes were served up to a few men of the company; while those which were placed before the rest were extremely mean. There were, in small quantities, three different sorts of wine; but you are not to suppose it was, that the guests might take their choice: on the contrary, that they might not choose at all. The best was for himself, and his friends of the first rank; the next for those of a lower order, (for you must know, he measures out his friendship according to the degrees of quality;) and the third for his own and his guests' freed-men. One who sat near me took notice of this, and asked me how I approved of it? Not at all, I told him. Pray, then, said he, what is your method on such occasions? Mine,

[s] "Ipse capillato diffusum consule potat,
Calcatamque tenet bellis socialibus uvam,
Cardiaco numquam cyathum missurus amico.
——————— Ipse capaces
Heliadum crustas, et inæquales beryllo
Virro tenet phialas. Tibi non committitur aurum.
Tu Beneventani sutoris nomen habentem
Siccabis calicem nasorum quatuor, ac jam
Quassatum, et rupto poscentem sulfura vitro."
JUV. Sat. V. 30—48.

"Vejentana mihi misces, tu Massica potas:
Olfacere hæc malo pocula, quam bibere."
MARTIAL. Epig. iii. 49.

[t] "Vinum dominicum ministratoris gratia est."
PETRON. Sat. 31.

I returned, is to give all my company an equal reception; for when I make an invitation, it is in order to entertain, not distinguish my company: I set every man upon a level with myself when I admit him to my table, not excepting even my freed-men, whom I look upon, at those times, to be my guests, as much as any of the others. At this he expressed some surprise, and asked me if I did not find it an expensive method? I assured him, not at all; and that the whole secret lay in being contented to drink no better wine myself than I gave to them[n]."

If we compare the ceremonies and usages above described with the convivial customs of the present day, we cannot but be struck with the numerous coincidences which subsist between them. The arrangement of our dinners, the succession and composition of the different courses, the manner of filling our glasses, of pledging our friends, and of drinking particular healths, are all evidently copied from the Greeks and Romans; and although certain peculiarities in our situation and habits have rendered the use of bumper cups and undiluted liquors too prevalent amongst us, yet the common distribution of wines at our banquets cannot be considered as very different from that which we have been discussing. With another modern nation, however, which has been thought to resemble the ancient Greeks in character, the analogy is still more complete. Thus, at all entertainments among the French, the ordinary wine is used with a large admixture of water, generally in the proportion of one to three, except immediately after soup, when it is drunk pure. The finer kinds are circulated in the intervals between the courses, or towards the end of the repast, and hence are termed *vins d'entremets;* but with particular dishes certain wines are served, as Chablis with oysters, and Sillery after roast meat. The *coup d'avant* of *wermuth* has been already noticed as corresponding with

[n] Pliny's Letters, by W. Melmoth, ii. 6.

the draught of *mulsum;* and the *coup du milieu,* which consists of some liqueur, " quod fluentem nauseam coerceat," may be regarded as identical with the cup of sweet wine handed round in the middle of a Grecian feast. With the dessert the luscious sweet wines are always introduced.

HISTORY OF MODERN WINES.

HISTORY OF MODERN WINES.

CHAPTER I.

PRELIMINARY OBSERVATIONS.

IN the Introduction to this work, it was observed, that, in consequence of the light derived from recent discoveries, the doctrine of fermentation has assumed a more simple and systematic form. We have ceased to regard the practice of different countries as involved in mystery, or dependent on peculiarities of which no satisfactory explanation can be given; and when we have once ascertained the circumstances in which the operation takes place, we can, in most instances, anticipate the result. In other words, having become acquainted with all the conditions necessary for securing the due maturity of the grape, and the development of the saccharine matter contained in its juice; having learned all the

particulars of the changes to which it is subjected, at least as far as these can be detected, we may pronounce with confidence, whether the product will be sweet or dry, generous or poor, dark-coloured or light, of a permanent quality, or subject to speedy decay. Great part, indeed, of the preceding discussion on ancient wines may be considered as illustrative of this proposition; being little else than a series of deductions from the acknowledged laws of vinous fermentation. But, although the rules thus established may enable us to form a general idea of the different classes of wines, they are of little avail, when we come to investigate their more variable and less palpable properties,—such, namely, as depend on agencies which either wholly elude our instruments of research, or are very imperfectly determined, and which frequently are not fully developed until after a long term of years. With respect to these phenomena, our knowledge is almost wholly empirical; for, though analogical reasoning may sometimes assist our inquiries, it can seldom be allowed to supersede the more laborious method of observation and experiment: at least, the conclusions obtained by it must be always more or less vague and uncertain.

Supposing, however, that this branch of chemical science were farther advanced than it is found to be, there would still be considerable difficulty in pursuing the description of wines, from the want of words to express, with accuracy, their chief distinctions, and the different shades in their sensible qualities. The English language, as was to be anticipated from our situation, is particularly limited in this department; and when we have gone through about half a dozen phrases, we find that our stock is exhausted. Nor would the adoption of the terms which other nations employ for the purpose of distinguishing their wines be of much avail on the occasion; as, to those who are unacquainted with the wines themselves, such terms could convey but very imperfect notions of their qualities; and, unless where greater correctness and precision can be attained, the resort to a foreign idiom ought to be avoided. This sort of embarrassment, however, is, in a great measure, inherent

in the subject; the names appropriated to the sensations of taste being in all languages confined to a small number, such as *sweet*, *sour*, *bitter*, *salt*, and perhaps one or two others: while the majority of the expressions borrowed to supply the deficiency, being derived from the perceptions of touch, can only approximate to the ideas meant to be described, and are consequently more or less indistinct. When we say of a fluid body that it is *sweet*, we describe an impression on the organ of taste, which cannot be mistaken for any other quality; but when we observe of the same body, that it is *hard*, we express a property which is generally held to be inconsistent with the notion of fluidity, and will therefore convey but a confused or erroneous idea, and which probably no two persons will understand in exactly the same sense[a]. Even if our nomenclature of tastes were much more complete than it is, the flavours of wines are so varied, and their minuter differences and combinations so infinite, that it would still be a very difficult task to designate them with requisite precision. In this perplexity we derive considerable assistance from a reference to the known flavours of other substances, which may be deemed analogous to those of wine; and in describing the varieties of aroma, we draw with equal freedom from the same source. Still there is often something so peculiar in the flavour and perfume of wines, as to baffle our utmost powers of description; and, indeed, it may be doubted whether one of the principal charms of choice wine do not consist in this uncertainty and indistinctness of taste and smell. Columella, at the close of his receipts for the pitching of wine, as has been already noticed, cautions the operator not to make the savour too palpable, lest the buyer should be deterred from the purchase: and when artificial flavours have been given to wines, it is generally admitted, that they are less

[a] "A *hard* taste," says Dr. Grew, "is fourfold; viz. penetrant, stupefacient, astringent, pungent." This may be correct; but there are at least two of these qualities which I never suspected to belong to hardness, until I read the above definition.

agreeable to the palate, when the taste of nutmeg, ginger, cloves, or any other substance with which they have been impregnated, can be distinctly named. In the description of the Saprian wine, formerly quoted, how inferior an idea should we have formed of its excellence, if the poet had merely ascribed to it a strong scent of the violet, the hyacinth, or the rose, instead of telling us, that its smell was a delicious compound of the odours of violets, hyacinths, and roses, and that it spread around the fragrancy of nectar and ambrosia!

When Grew, then, fancied that he had succeeded in analyzing the nature, and establishing a theory, of tastes, of which he supposes there are not fewer than eighteen hundred "sensible and definable varieties" in kind and degree, beginning with ten simple tastes, and proceeding to those that are more or less complex[b], he deceived himself with words, and overlooked the fact, that the chemical combination of any two or three elementary principles gives to the compound entirely new and distinct properties, which it is impossible to recognize in any one of these principles, and which cannot, therefore, be satisfactorily expressed by any conjunction of their names. In most wines, it is true, certain tastes predominate; and these can be easily discriminated, especially when the wine is new. Port, for example, may be called bitter, rough, and astringent; Rhine wines, sharp and acidulous; Malmsey, bitter-sweet, &c.: but what terms will convey an adequate notion of that peculiar ethereal flavour which distinguishes each of these liquors when duly mellowed by age, and which, in fact, is only developed by long keeping? To tell us that it is penetrant, volatile, transient, and so forth, is nothing to the purpose: and the only satisfactory and intelligible way in which the description can be given, as has been already observed, is by a comparison with some other known sensation of taste, respecting which all men are agreed.

[b] Discourse of the Diversities and Causes of Tastes, chiefly in Plants. Read before the Royal Society in the year 1675.

In like manner, those properties of wine which we recognize by the organ of smell,—

> " Foolish delights, and fond abusions,
> Which do this sense besiege with light illusions,"

are equally various and difficult of investigation and definition. In general, they bear some analogy to the tastes; but sometimes they are essentially different. Frequently, also, they only become sensible after a long course of years, exalting the other virtues of the liquor, and imparting to it a delicacy which it did not before possess. Accordingly, in all descriptions of the rarer wines, much stress is laid on such attributes; and in certain languages particular terms are appropriated to the designation of them. Occasionally, too, they remain entire long after the liquor has passed into a state of acescency, or partial decomposition.

There can be little doubt, that the characteristic varieties of taste and odour originate chiefly from peculiarities of the soils where the wines are grown; for they continue more or less distinct in the produce of particular districts, notwithstanding great differences in the exposures of the vineyards, and in the warmth of the seasons. But it is equally certain, that the last-mentioned circumstance has also a material influence on these qualities, which are, in truth, of so delicate and inconstant a nature, that they may be said to vary from year to year; there being, perhaps, no two vintages, though collected from the same spot, and managed in the same manner, that will be found completely identical in flavour[c] and perfume. Moreover, it is evident, that the qualities under con-

[c] In order to avoid misconception, it may be proper to state, that I use the term 'flavour,' to designate that full impression on the palate which is made by a wine or any other fluid, when the sense of smell is entire; and which, therefore, conveys some idea of a combined perception of both organs. This is unquestionably the present acceptation of the word, though, in old French, *flaveur* was originally synonymous with *odour*. The last-mentioned term is liable to no misinterpretation.

sideration must be affected by every change of the conditions in which the fermentation of the liquor takes place. They are obscured by the use of bad methods; they are often entirely eclipsed or destroyed by the injurious admixtures and adulterations to which the wine is subjected, after it is made.

Though, in describing wines, it is not unusual to speak of the 'flavour of the fruit,' yet none of the red class can be properly said to retain the taste and aroma of the grapes from which it is made. The white muscadine wines, on the other hand, in whatever soils they may be grown, always discover more or less of the taste and odour of the fruit. This is particularly observable in the produce of the Frontignan vine.

As tastes and smells reside not in the objects themselves, but in the senses by which they are perceived, so they are liable to be modified by the habits and conditions of these organs. The difference of tastes, in this view of the subject, is proverbial; and much of the diversity undoubtedly proceeds from the way in which the palate has been exercised. Thus, strong liquors blunt its sensibility, and disqualify it for the perception of the more delicate flavours of the lighter wines. A person accustomed only to bad wines will often form but a very erroneous estimate of the better growths, and sometimes, even, give the preference to the former. Whole nations may be occasionally misled by this prejudice. A traveller, who arrives at the end of his journey exhausted by fatigue and thirst, will be apt to ascribe the most delicious qualities to the first ordinary wine presented to him, which, under other circumstances, he perhaps could have hardly endured: and a continued use of the inferior liquors of one country may lead him to overrate the vinous produce of another. In returning from Italy, the common growths of the Rhine appeared to me of excellent flavour, and their acidity scarcely perceptible: but had I come from Burgundy or Dauphiny, I have no doubt that they would have tasted disagreeably sour. Therefore, if it were possible for an individual to traverse

all the wine-countries of the globe, and taste all the different vintages, still his observations and judgments would be liable to much fallacy, and could be reckoned decisive only when confirmed by general report.

If these difficulties be not overrated,—and they must, I think, appear in the same light to every one who considers the subject with any degree of attention,—it will follow, that the attempt to give a full and accurate history of wines must be deemed nearly hopeless; since each growth would demand a particular description, and all the details concerning it can be learnt only by long and patient inquiry, by repeated experiments, and by watching it in its progress during the several changes which it may experience. Even the laborious PLINY, as I have before had occasion to remark, found himself embarrassed by the multiplicity of facts which the study of the wines of his age embraced. How much more arduous, then, must be the task of describing and distinguishing those of modern times, when the culture of the vine has spread over large portions of the globe which were wholly unknown to the ancients; when the species and varieties have multiplied to an extent which the industry of our botanists can hardly overtake; and when the utmost ingenuity has been exerted in improving and diversifying its produce! Indeed, the only way in which the discussion can be brought within any moderate limits, is by confining our attention to the principal growths, by arranging them in classes, and by tracing the points of resemblance and contrast between the wines of different countries, as far as they can be ascertained. That classification is to be preferred, which shall present, under fixed points of view, the greatest number of analogies and differences between them, and afford the easiest references to their distinctive characters.

In a very useful work on modern wines, which appeared for the first time a few years ago, and which may be reckoned the most complete of its kind[d], the several growths are divided into

[d] Topographie de tous les Vignobles connus: par A. JULLIEN. Paris, 1814. (2de Edition, 1822.)

genera and *species;* the former being determined by the qualities of sweetness, dryness, body, and colour,—while the latter are arranged, according to the comparative excellence of their qualities, under the heads *vins fins*, *vins ordinaires*, and *vins communs*,—these being further subdivided as occasion may require.

Although this scheme may answer sufficiently well for a general topographical description of vinous liquors, and I am disposed to adopt it to a certain extent,—yet, in a more general point of view, it is perhaps less systematic than could be wished; and a more satisfactory arrangement, if my judgment do not deceive me, will be found in the division of wines into two principal *classes*, viz. RED and WHITE, which may be again separated into two *orders*, DRY and SWEET; while the *genera* are made to depend on the distinctive characters derived from soil and climate, the *species* on particular localities, and the *varieties* on the respective qualities of the different growths. Between the sweet and dry wines, however, the author of the above-mentioned treatise has introduced an intermediate order of *vins moëlleux;* under which term are comprehended such wines as have a full body and rich flavour, inclining more to a saccharine than austere taste, yet exactly resembling neither. As this order embraces the great majority of the fine wines of France, it would be desirable to find some corresponding epithet in the English language, of which we could avail ourselves. The word *mellow*, which has been sometimes used in a similar sense, might, perhaps, be adopted with advantage, were it not employed to designate a more general condition of wines.

In order to explain more fully the nature and use of the proposed arrangement, let us take a brief survey of those qualities which we expect to recognize in the best wines, in their more perfect states.

All wines possess what is called the vinous flavour, originating from the alcohol which they contain, and modified, in the different varieties, according to the proportions in which that ingredient is combined with the aqueous, acid, saline, mucilaginous, extractive, and aromatic principles. In good wine the taste of none of these

substances should be predominant; but the whole ought to form a perfect compound, having its distinct and peculiar flavour, which should be full and entire, not cloying on the palate, or leaving any unpleasant after-taste[e]. In the manufacture of certain wines, however, we are sometimes obliged to forego this species of excellence, in order to obtain particular qualities. The virtues of the brisk wines of Champagne, for example, reside in the carbonic acid gas, which escapes, in a great measure, when the pressure is withdrawn by which it was retained in union with the water and mucilage, carrying along with it much of the alcohol and aroma. The grateful properties of sweet wines, on the other hand, depend on the abundance of saccharine matter which remains undecomposed; and the vinous attributes of some of the Burgundy wines are sacrificed, in order to preserve the high aroma, for which they are so justly prized.

In some points of view, white wines may be regarded as more perfect than red wines; at least they appear to contain fewer elements of decomposition. The strong red wines, which are fermented with the hulls, and sometimes with the stalks of the grapes, do not attain their highest excellence until after they have deposited a considerable

[e] The following verses may be received as conveying a tolerably correct description of the qualities generally sought for in the more perfect wines:—

"Apricis cupio vinum mihi collibus ortum,
Molle, vetus, fragili prosiliensque vitro;
Quod micet, et rutilo nitido præclarius auro,
Et cujus morsus saucia lingua probet;
Ora nec ingratus gustantum lædat amaror,
Et gravibus curis pectora pressa levet;
Nec capiti noceat, sed vertice serpat ab ipso,
Protinus ad summos perveniatque pedes.
Si datur hoc vobis, Acheloia pocula longe
Ite, salutiferi toxica sæva meri!"*

* De Protopo—apud Randella de Vinea, Vindemia, et Vino. Venet. 1629.

portion of their tartar and colouring matter: but the lighter wines are generally in perfection before this change takes place; for when they lose their colour, they speedily alter, and pass into a vapid state. White wines, on the other hand, even when of inferior quality, will remain much longer unchanged, probably because they contain less mucilaginous and extractive matter; and, when they have been well fermented, may be preserved for an indefinite length of time. They, however, usually yield to the red in respect of flavour and perfume. Few, if any, of the white wines of France, for instance, can vie in these points with the red growths of the principal vineyards of Burgundy, Gascony, and the Rhone. In Germany, on the other hand, the red wines are seldom so high-flavoured as the white.

The colour of red wines varies from a light pink to a deep purple tint, approaching to black: the *clarets* hold the intermediate rank between these two extremes. On exposing red wine in bottles to the action of the sun's rays, the colouring matter is separated in large flakes, without altering the flavour of the wine: when lime-water is added, it is precipitated along with the insoluble salt that is formed by the union of the lime with the acid of the wine. Some white wines are nearly colourless, but the greater proportion have a yellow tinge. Certain wines, however, such as those of Cotnar, in Moldavia, have a greenish colour, which becomes deeper by age. The pale yellow wines, when long kept, acquire a more or less bright amber hue, in consequence, as has been conjectured, of the oxygenation of the carbonaceous matter they contain; and this supposition appears to receive confirmation from the circumstance of some of the richer sorts being changed to a dark-brown, after they have been exposed for a few hours to the contact of the air. They deposit a small portion of tartar, but seldom much extractive matter.

The *fine* wines are to be known from the *ordinary*, by their superior flavour, aroma, and body: they always improve by long

keeping. But many of the ordinary wines will, with due care and management, preserve their qualities unimpaired during a considerable term of years. As the first-rate growths are confined to a small number of vineyards, and these often of very limited extent, the supply of such wines can never equal the demand. Every one who can afford the luxury, is naturally desirous to stock his cellar with those of the choicest quality; he orders no others; and the manufacturer and wine-dealer are thus induced to send into the market a quantity of second-rate and ordinary kinds, under the names of the fine wines, which they are unable to furnish. In this way great confusion and misunderstanding have arisen, in those countries where they are but little known, with respect to the true characters of many wines of the greatest name. The *common* wines constitute the lowest class, and are seldom known beyond the limits of the districts where they are produced.

It is chiefly in discussing the wines of France, of which the varieties are very numerous, and the qualities often essentially different, that such a classification will be found particularly useful. In other countries, where the growths are fewer and less important, —or where the greater part of the vintage is reduced to a nearly uniform standard, by the processes employed during the fermentation, or by the admixtures which take place after it is finished, — these multifarious divisions become unnecessary, and general description may suffice. But as the French territory furnishes some of the best specimens of wine in each class, and unquestionably excels every other region of the globe in the manufacture of red wines in particular, it will be desirable to keep the same distinctions in view, as far as may be necessary for the purposes of the present inquiry. In the following chapters, however, it is by no means my intention, for the reasons formerly stated, to describe every species and variety which the principal wine-countries afford. Such a catalogue is foreign to the object of this work; and, even if it could be accomplished in a satisfactory manner, it would doubtless prove

uninteresting to the majority of readers. In general, it will be sufficient to exhibit the generic characters of the best known wines, or of those which come most frequently into circulation by commerce, with the addition of such statistical and historical details as the subject may appear to demand. From the description of the first growths in their genuine state, it will be easy to appreciate the leading qualities of the inferior varieties, and to discover the adulterations which are most commonly practised by the manufacturer and dealer.

CHAPTER II.

OF THE WINES OF FRANCE.

NOTWITHSTANDING Pliny and Columella make repeated mention of the vintages of Gaul, and of particular varieties of the grape which were imported from that country in their time, there is reason to believe, that the culture of the vine was then of recent introduction, and confined to the southernmost provinces; for we are informed by Diodorus, who lived about a century before those writers, that the climate was too cold to produce either wine or oil, and that the ordinary beverage of the inhabitants consisted of beer or mead; but as they were fond of strong liquors, and, when they could, were apt to indulge in them to excess, the merchants of Italy carried on a lucrative trade in wines with the Gauls[a]. It is stated, however, by Posidonius, who was nearly cotemporary with Diodorus, and who wrote from the personal observations he had made when travelling in the country, that the territory of Marseilles supplied a portion of the wines in use among the wealthier orders of the people[b]: and Strabo describes the whole of Narbonese Gaul as yielding every kind of fruit that was to be found in Italy; but beyond the Cevennes, he says, the grapes seldom attained their full maturity[c]. From this expression we may conclude, that vineyards were already established in the central departments. In the fourth century we find Eumenius alluding

[a] Biblioth. Hist. v. 26. [b] Athenæus, v. 13. [c] Geograph. iv.

to the different modes of propagating the vine among the Aquitani, and on the banks of the Soane, probably in the same district which is now known by the name of the Côte d'Or[d]. In proportion as agriculture advanced, the climate gradually improved, and the inhabitants of the northern districts endeavoured to rival their southern neighbours in the manufacture of wine. The banks of the Cher, Marne, and Moselle were planted with vines, which are said to have become an object of envy to the contiguous nations, and to have been one of the motives of their frequent irruptions. Even in Normandy, Picardy, and Brittany, this species of culture was attempted; but, in consequence of the cold winds and fogs to which those countries are exposed, the wines grown there were generally harsh and sour, and most of the vineyards have now given place to crops more suitable to the climate.

The soil of France exhibits every species of strata that is most congenial to the vine; the surface, being diversified with numerous and gently swelling hills, abounds in favourable exposures; the different temperature in the several provinces occasions great variety in the character of the grapes; and all these gifts of nature have been improved by the industry and skill of the natives, who at present deservedly rank as the first wine-makers in the world. The whole expanse of France, from the banks of the Rhine to the foot of the Pyrennees, as Chaptal has triumphantly observed, presents a succession of fertile and beautiful vineyards, where the most agreeable wines in Europe are grown; and almost all quarters of the globe have become tributary to that favoured country for those liquors, which it furnishes of unrivalled excellence, and in inexhaustible profusion. In the year 1808, according to the calculations of the same author, the quantity of land occupied by vines amounted to 1,613,939 *hectares*, or 3,988,974 acres; and the average quantity of wine, produced in the preceding five years, was

[d] Panegyr. Vet. vii. 6.

35,358,890 *hectolitres*, or 934,184,500 gallons. Of this quantity about a sixth part is consumed in distillation. The value of the several qualities may be stated as varying from seven and a half to two hundred francs for the hectolitre; and the sum total of the whole is reckoned at 718,941,675 francs, being upwards of twenty-eight millions sterling[e].

Examples of almost all the modes of cultivating and training the vine that were practised by the ancients, are to be met with in the French territory. In some of the southern provinces it is occasionally seen married to the elm or maple, which are cut down to nearly the same height which COLUMELLA assigns to the *arbusta* of Gaul: in others, it is grown without poles; and the ground between the rows is ploughed by oxen, and sown with Indian corn, or green crops. In certain situations it is borne upon treillises, like the *juga* of the Romans; and in Medoc it is trained horizontally upon low rails, which correspond exactly with the ancient *canterii*[f], and are known in the country by the name of *carassanes*[g], the land being ploughed between. The quincunx form of planting is generally retained. That many of these customs should date from the first introduction of the vine in the Gallic provinces, will, perhaps, appear less surprising than that the method of propagation, and claims to antiquity, of the best vines in Burgundy, should be still essentially the same as described in the Oration of EUMENIUS: for that writer, speaking of the state of the vineyards in the *pagus Arebrignus*, or district of Beaune, complains, that, from frequent laying, the roots, of which the age was unknown, were raised in the trenches, so that the layers (*provins*) had not a due depth of soil, but were

[e] De l'Industrie Françoise, Tom. I. p. 175—7. See Appendix, No. IV.

[f] "Quæ pedaminibus adnixæ singulis jugis imponuntur, eas rustici canteriatas appellant. Mox quæ defixis arundinibus circummunitæ per statumina calamorum materiis ligatis in orbiculos gyrosque flectuntur, eas nonnulli characatas vocant."—COLUM. v. 4.

[g] Possibly a corruption of the term *characatæ*, from the Greek χάραξ, *vallus*, or χαράσσω, *exaro*.

exposed to the injurious influence of the sun and rain[h]. This inconvenience, however, is now obviated by elevating the ground, as occasion may require, into hillocks or mounds around the plants.

In tracing the history of French wines, we are struck with the fact, that many vineyards, which have now little or no repute, were renowned in former times for the excellence of their growths; while those which, of late years, have maintained the greatest celebrity, were then unknown, or almost unnoticed. Thus, the wines of Orleans and of the Isle of France were at one time in greater estimation than those of Burgundy and Champagne; and even Mantes, which is on the borders of Normandy, was famed for the produce of its vines. That the growths of these districts may have much degenerated, is not improbable; but that they ever equalled the finer wines of the Côte d'Or, or the Bordelais, can hardly be believed. During the middle ages, there seems to have been less difference in the qualities of wines than is now observable,—probably because the manufacture was carried on in a slovenly manner, and little pains were taken to meliorate them by long keeping. Hence many wines, especially in those countries which did not enjoy the benefits of commerce, were accounted choice, merely because no better were known. With regard to such as were grown in the neighbourhood of Paris, it is evident, that, though they may have originally been of a somewhat higher order than at present, yet the great and increasing consumption of the capital must have soon induced the proprietors to extend the cultivation of the vine in all directions, and to resort to the use of strong manure, and other expedients, in order to render the supply commensurate with the demand. The inferior quality of the article furnished would naturally lead to the importation of the produce of those districts where the vineyards preserved their ancient reputation; and as most of these had the advantage of a

[h] "Radices enim vitium, quarum jam nescimus ætatem, millies replicando congestæ, altitudinem debitam scrobibus excludunt; et ipsam propaginem non debitam sed obtectam produnt imbribus eluendam, et solibus perurendam."—Panegyr. Vet. vii. 6.

warmer climate, they would soon supplant the less favoured growths. When the choicer wines of Burgundy and Champagne became generally known, those of Orleans fell into disrepute; and the name has been since used proverbially to denote indifferent wine. The same cause led to the gradual abandonment of those vines which had been planted in an uncongenial soil.

On the other hand, there can be little doubt, that the wines grown on certain spots, where the conditions of both soil and climate are highly favourable, have lost much of the excellence by which they were formerly characterized. Nor can this deterioration surprise us, when we consider the variety of delicate circumstances by which the health of the vine, and the quality of its fruit, are liable to be affected. A single year of slovenly culture, an injudicious mode of pruning, or the substitution of new plants for old, may ruin the reputation of a vineyard for ever. For a long time the choicest growths, not only in France but in other countries, were raised on lands belonging to the church; and the *vinum theologicum* was justly held to be superior to all other wines. The rich chapters and monasteries were always more studious of the quality than of the quantity of their vintages; their grounds were tilled with the greatest care, and their vines were managed in the most judicious manner: nor did they reject a plant that bore but sparingly, provided there was no falling off in the goodness of the liquor which it supplied. Moreover, in the middle ages, it is well known that the clergy were almost the sole depositaries of learning; and the continued opportunities of observation and study which their retired pursuits afforded them, had probably brought them acquainted, at a very early period, with the best methods of directing the fermentation of the grape, and meliorating the produce. When their domains passed into the hands of laymen, the same assiduity and skill were seldom shown in the culture of the vines, or treatment of the vintage; and, in many instances, the old plants, which yielded the most valued wines, were rooted out, to make room for others

that gave a more abundant supply, but of inferior character. As long as the Clos-Vougeot remained in possession of the Cistercian abbey, its vines gave but small crops of fruit; and the monks were generally content with obtaining from fifteen to twenty hogsheads of the first quality of wine. Since the Revolution, those vines, which were supposed to be four or five centuries old, have disappeared; the greater part of the grapes are now mixed together; and about three hundred hogsheads are obtained, which, on account of the ancient repute of the vineyard, sell at a high price; but which, when compared with the select vintages of other times, and with some of the present growths of the adjacent territory, can only be regarded as of secondary rank. In like manner, the white wine of Château-Chalons, a few miles from Lons le Saulnier, in the department of the Jura, which was made with much care from late-gathered grapes, ranked, while the vineyard continued under the direction of the chapter of the town, as one of the best of France; but since it has been sold and divided among a number of small proprietors, who act each one for himself, the vintages are made at an earlier period, and their reputation has consequently declined.

To these transfers of property, and the changes of management consequently introduced, we may attribute much of the degeneracy observable in particular wines, of which the superiority was once unquestionable; but other causes, still more extensive in their influence, concur in producing the same effect. From the frequent mention of claret wines by old writers, there is reason to believe, that a large proportion of the best red growths were of that description. As long as they were drunk without an admixture of water, it was of little consequence whether they were of a purple or rose colour; and, if the liquor was equally good, the latter tint might perhaps obtain the preference. But the custom of using all the ordinary wines in a highly diluted state has led to a change of sentiment in this particular. Wherever red wines are made, the manufacturer strives to furnish them as high-coloured as possible; and, in several districts,

the preparation of strong dark wines, for the purpose of mixing with the lighter growths of other provinces, forms a principal branch of commerce. To attain the object in view, the fermentation is continued an undue length of time; the murk is trodden in the vat, and the harsh must that is procured by the operation of the press is mixed with the first produce of the vat. The consequence is, that many of these wines, though abounding in strength and colour, contain from the beginning the germs of a speedy decay; the crust which, by the treading in the vat, had been mingled with the already fermented wine, imparts the acidity which it had contracted from the contact of the atmospheric air; and the mixture of juice subsequently pressed from the murk has the effect of adding a large quantity of mucilaginous-extractive matter, which accelerates the decomposition of the liquor. Hence it comes, that few of those wines, notwithstanding their spirituosity, will keep well; and, in exporting them, it is usually deemed necessary to throw in a portion of brandy, to check their tendency to spoil.

These remarks may possibly appear inconsistent with the superiority previously ascribed to France in this branch of industry; and it must be acknowledged, that a more particular inquiry into the operations of the growers and manufacturers in the several provinces will lead us to modify, or restrict considerably, that tribute of approbation. In many of the departments, the modes of culture and treatment of the vintage are exceedingly faulty; and a large proportion of the wines are consequently of an inferior character. The poverty or ignorance of the farmers, and their attachment to a certain routine, prevent them from adopting better methods; and it is only from the cellars of the great capitalists, or independent proprietors, that the first-rate liquors are supplied. Even they, however, are often tardy in admitting improvements, which have both theory and practice in their favour. Although upwards of twenty years have elapsed since Chaptal first pointed out the utility of covering the vat during the fermentation of the

must, few persons have profited by the suggestion, and the greater part of the red wines continue to be made in open vessels. But the efforts of quackery may at last accomplish what science has been unable to perform. Within these two years, the attention of the manufacturers of wine throughout France has been generally directed to the subject, by the alleged discovery of a process, which has been said not only to improve the strength, flavour, and aroma of the wine, but to increase the quantity in the ratio of ten to fifteen per cent., and even to render it incorruptible. This wonder-working process, however, although a patent has been granted for it by the government, is by no means of recent origin; having been invented, and described in one of the volumes of the Journal Economique, nearly forty years ago. It consists in the application of a head and refrigeratory to the top of the vat, by which means the spirit and aroma of the wine that may be volatilized in the fermentation are thrown back into the liquor; while the carbonic acid gas is allowed to escape through a tube, of which the extremity is plunged in a vessel of water. A series of comparative experiments, which were conducted with every possible precaution, have shown that the pretensions of the person who now claims the discovery have not been realized; that the quantity of the produce is not increased ten or fifteen per cent. by the adoption of this apparatus; and the most that can be said in its favour is, that it secures the same advantages which may be obtained by simply covering the vat[1]. As the employment of the distillatory apparatus is attended with great trouble and expense, its partisans are not likely to become very numerous; but the notice which it has excited will probably have the effect of bringing the other method into more general use. The use of the bent tube, or syphon, however, for the disengagement of the carbonic

[1] Rapport sur le Procédé Vinificateur de Mlle. Gervais, suivi d'Expériences comparatives. Par F. Delavau, Propriétaire. Bordeaux, 1822.

acid gas, in the manner above described, may prove serviceable in the manufacture of the finer wines[k].

At present the growths of the ancient provinces of Champagne, Burgundy, Dauphiny, and the Bordelais, are decidedly the best which France supplies. The wines of the more northern departments are, with few exceptions, of a very inferior order; and the quantity of them produced scarcely suffices for the consumption of the inhabitants. Those of Languedoc, Roussillon, and other districts of the southern division of the kingdom, are, in general, more distinguished by strength than by flavour, and hence are well adapted for the purposes of distillation; but, as sweet wines, some of them rank very high. In the following description I shall confine my attention chiefly to the wines of the above-mentioned territories, and of these shall notice only the best kinds; referring such of my readers as may wish for more particular details to the work of JULLIEN, on which, as far as concerns the growths of France, the fullest reliance may be placed.

SECTION I.

OF THE WINES OF CHAMPAGNE.

F this province the chief growths are produced in the department of the Marne, and are commonly divided into River and Mountain wines—*vins de la rivière de Marne*, and *vins de la Montagne de Reims;* the former being for the most part white,—the latter red. This distinction occurs as early as the ninth century. In the 'Bataille des Vins,' one of the fabliaux of the thirteenth century, in which the different vintages then in repute are described as passing in

[k] See Appendix, No. III.

review before PHILIP AUGUSTUS, the wines of Epernay, Hautvilliers, Sezanne, Tonnerre, and Chablis, are particularly specified: those of Ay and Cumières are named for the first time in the poems of EUSTACE DESCHAMPS, who flourished about two centuries later. When more generally known, the Champagne wines soon rose into high estimation; and became, as PAULMIER has observed, the ordinary beverage of kings and princes. Several of the potentates of Europe, and, among others, our Henry VIII., are said to have had vineyards in the country; yet RABELAIS, who was certainly a competent judge in such matters, makes no mention of these growths, although he cites the wine of Arbois with approbation. In subsequent times, however, the wines of Champagne have been constantly advancing in celebrity; and are now, perhaps, of all wines, those in the greatest vogue, and most general demand.

By Champagne wine is usually understood a sparkling or frothing liquor, or a wine subjected to an imperfect fermentation, and containing a quantity of carbonic acid gas, that has been generated during the insensible fermentation in bottle, and is disengaged on removing the pressure by which it was retained in solution. This notion is not altogether correct; for the district under review furnishes many excellent wines, both red and white, which do not effervesce. It is true, indeed, that most of the white, or River Marne wines, are brisk; and, in general, they are of superior quality, and more highly esteemed than the red, or Mountain wines. They are distinguished by their delicate flavour and aroma, and the agreeable pungency and slightly acidulous taste which they derive from the carbonic acid. Their exhilarating virtues are familiar to every one.

It must be remembered, however, that the briskest wines are not always the best. They are, of course, the most defective in true vinous quality; and the small portion of alcohol which they contain immediately escapes from the froth as it rises on the surface, carrying with it the aroma, and leaving the liquor that remains in the glass

nearly vapid: for it has been shown by HUMBOLDT, that, when the froth is collected under a bell-glass surrounded with ice, the alcohol becomes condensed on the sides of the vessel by the operation of the cold[1]. Hence the still, or the creaming, or slightly sparkling Champagne wines (*v. crêmans*, or *demi-mousseux*) are more highly valued by connoisseurs, and fetch greater prices, than the full-frothing wines (*v. grand-mousseux*). By icing these wines before they are used, the tendency to effervesce is in some degree repressed, or only allowed to operate to such an extent as may be compatible with the more perfect flavour that we desire to find in them; but, when they are kept cool, this precaution is unnecessary.

Among the WHITE wines of Champagne, the first rank is usually assigned to those of Sillery; under which name is comprehended the produce of the vineyards of Verzenay, Mailly, Raumont, &c., situate at the north-eastern termination of the chain of hills that separates the Marne from the Vesle, and belonging formerly to the MARQUESS of SILLERY. It is a dry, still liquor, of a light amber colour, with considerable body, and a flavour somewhat analogous to that of the first growths of the Rhine; and, being one of the best fermented Champagne wines, may be drunk with the greatest safety. Having been originally brought into vogue by the peculiar care bestowed on the manufacture of it by the MARÉCHALE D'ESTRÉES, it was long known by the name of *vin de la Maréchale*. It has always been in much request in England, probably on account of its superior strength and durable quality. It is usually drunk iced.

The best River wines, strictly so called, are obtained from the vineyards situated in the valleys and on the sides of the hills that border the Marne at Ay, Hautvilliers, Epernay, Dizy, Avenay, &c., and occupy a tract of country about five leagues in extent: but the estate of Cumières, although in the midst of these vineyards, lying under the same line, and with the same exposure, yields red

[1] CHAPTAL, Art de faire le Vin, p. 137.—See Appendix, No. III.

wines only, and of a superior quality to the others that are grown in the neighbourhood. In general, it may be observed, that the vineyards on the banks of the Marne supply the choicest wines; and that the quality degenerates in proportion as they recede from the river. Hence the vintages of Hautvilliers and Ay have always been preferred to those of Epernay and Pierry, and the latter to those of Avise, Oger, Lemesnil, &c. This rule, however, is not without exceptions; for the small vineyard of Closet, which lies in the bosom of the hill to the south-west of Epernay, yields a wine fully equal to that of Ay; and at Cramant, about two leagues distant, the south-eastern slope of the same ridge furnishes a liquor but little inferior to that celebrated growth.

Of the wine of Ay Baudius formed so high an opinion, that he declared to the President de Thou, it ought to be called *vinum Dei*. It is unquestionably an exquisite liquor, being lighter and sweeter than the Sillery, and accompanied by a delicate flavour and aroma somewhat analogous to that of the pine-apple. When of good quality, it is bright, and nearly colourless; and, as it is always more or less sparkling, is equally inviting to the eye as it is grateful to the palate:—

"Cernis micanti concolor ut vitro
Latex in auras, gemmeus aspici,
Scintillet exultim; utque dulces
Naribus illecebras propinet
Succi latentis proditor halitus!
Ut spuma motu lactea turbido
Crystallinum lætis referre
Mox oculis properet nitorem!"[m]

That which merely creams on the surface, is preferred to the full-frothing wine. When still, it sometimes passes under the name of Sillery, but may be always distinguished by its paler colour and weaker body.

[m] Coffin, Ode Alcaic.

The wines of the neighbouring territories of Mareuil and Dizy are of similar quality to those of Ay, and are often sold as such. Those of Hautvilliers, on the other hand, which formerly equalled, or even surpassed the growths just named, have been declining in repute since the suppression of the monastery to which the principal vineyard belonged. The Pierry is of a drier quality, and characterized by a marked flinty taste, which it is supposed to derive from the stony soil on which it grows. Among the secondary growths, those of Cramant, Avise, Oger, and Menil, are the most deserving of mention. They are chiefly prepared from white grapes, and are sometimes mixed with the wines of Ay, in order to impart additional briskness.

Of the Reims Mountain wines, those of Verzy, Verzenay, Mailly, Bouzy, and St. Basle, are most esteemed. They are of good colour and body, and have a high and agreeable flavour; but the Clos St. Thierry, which was formerly the property of the archbishops of Rheims, and which lies to the north-west of that town, furnishes the only red wine that can be said to unite the rich colour and aroma of Burgundy, with the delicate lightness of Champagne. At Taisy, Ludes, Chigny, Rilly, and Villers-Allerand, wines little inferior to those first mentioned, are produced; and in the lower grounds (*la basse montagne*), the vineyards of Chamery, Ecueil, and Villedemange, yield red wines of good quality, which, when the season has been favourable, will keep for ten or twelve years.

The soils of the principal vineyards throughout Champagne are composed of a loose marle, resting on beds of chalk, and in some places mixed with flints. Many of the exposures would be pronounced, *à priori*, to be unfavourable to the vine. The middle grounds, and those which face the south, as at Ay and Hautvilliers, generally furnish the best grapes; and the wines which are procured from vineyards with an eastern or western aspect are usually valued

one-third less: yet the Sillery and Mountain red wines are almost all grown on the northern or eastern declivities of the hills.

Since the time when ARTHUR YOUNG travelled[n], the price of vineyard land in this district has considerably increased. On the hill, for example, which rises immediately behind the village of Ay, at an angle of about thirty-five degrees, there are a thousand arpents (of forty-three *ares* each, or little more than an English acre), which may be valued at from ten to twelve thousand francs the arpent. One piece has been lately sold as high as fifteen thousand francs. The produce is estimated at eight hundred bottles for every arpent. At Hautvilliers some of the land is of equal value, especially the Côte-à-bras, which forms the hollow of the slope directly under the village, and may contain about thirty arpents, but only seven or eight of the best quality. As much, even, as twenty-eight thousand francs were lately refused for two arpents and a half of this valuable soil. It formerly belonged to the monks of the abbey of Hautvilliers, one of whom was the inventor of a process which may be considered as nearly identical with the *Appareil Gervais;* being in fact nothing else than the adaptation of a bent tube to the bung-hole of the cask, like the safety-tube of WELTER, which was partially filled with water, so that the carbonic acid gas generated during fermentation could escape, without exposing the liquor in the cask to the contact of the external air.

All the best vines of the territories just mentioned are old, though they have the appearance of young plants, in consequence of the system of *provignage*, which is generally practised throughout the district. They are trained very low, seldom rising more than eighteen inches, and are planted about the same distance asunder. In the month of March they are pruned to within three or four eyes, according to the strength of the plant; and the stock is

[n] See PART FIRST, p. 36.

pressed down an inch or two towards the hill. Every three or four years, however, the whole is buried in the same direction, leaving only two or three eyes above the surface, at the extremities of the branches. Then follows the first dressing. Another is given in the month of May, and, in some places, a third, later in the season. The *provins* are all manured, and the compost employed for the purpose is formed of layers of turf, litter, sand, and a black clay, or marle, containing numerous fresh-water shells;—so that, from the frequent use of provins, the soil becomes, in a great measure, artificial. The plants generally cultivated are the *pineau* and *plant doré;* the former giving the best quality of wine. Latterly, a new species, called the *plant vert*, has been introduced, which is said to be less apt to drop its fruit than the other kinds.

For the manufacture of the WHITE Champagne wines, black grapes are now generally used. They ripen more easily, and resist the frosts and rains common about the time of the vintage much better than the white sorts. Hence the wines which are made from them alone, or from a mixture of the two, are not so liable to degenerate as those prepared from white grapes only. They are picked with great care; those which are unripe, shrivelled, or rotten, being rejected: they are gathered in the morning, while the dew is yet upon them; and it is remarked, that when the weather happens to be foggy at the time of the vintage, the produce of the fermentation is considerably increased. They are then subjected to a rapid pressure, which is generally finished in an hour. The wine obtained from this first operation is called *vin d'élite*, and is always kept apart from the rest. After the edges of the murk have been cut, and turned into the middle, another pressing takes place, which furnishes the *vin de taille* (*vinum circumcisitum* of VARRO); and the repetition of these processes gives the *vin de deuxième taille*, or *tisanne*. The liquor procured by these successive pressings is collected, as it flows, in small vats, from which it is removed, early on the following day, into puncheons which have been previously sulphured. In

these the must undergoes a brisk fermentation, and is allowed to remain till towards the end of December, when it becomes bright. It is then racked, and fined with isinglass; and, in a month or six weeks more, is racked and fined a second time. In the month of March it is put into bottle. After it has been about six weeks in bottle, it becomes brisk, and towards autumn the fermentation is often so powerful as to occasion a considerable loss by the bursting of the bottles; but after the first year such accidents rarely happen. A sediment, however, is generally formed on the lower side of the bottle, which it becomes necessary to remove, especially if the wine be intended for exportation. This is accomplished either by racking the wine into fresh bottles, or, if it be already brisk, by a peculiar manipulation, termed *dégorgement;* the sediment being allowed to settle in the neck of the bottle, from which it is forced out, on drawing the cork. These operations, and the loss sustained by them, and by the bursting of bottles, which is seldom less than twenty per cent, and often much more, necessarily enhance the price of the wine. The Sillery wines are kept in the wood from one to three years before they are bottled.

The wine made from the last pressings of the grapes, especially if they be repeated beyond the second cutting, is apt to be tinged with a portion of colouring matter. As it contains a larger portion of alcohol than the first runnings, it is sometimes used for distillation, but is more frequently reserved for the purpose of mixing with the inferior red wines.

In order to procure the wine known by the designation of PINK Champagne (*v. rosé*), the grapes are first slightly trodden and freed from the stalks, and the fermentation is allowed to commence before they are subjected to the press, in order to facilitate the solution of the colouring matter. After this, the process is managed in the same way as with the white wines. At present the pink Champagne is less in request than the colourless, and has in fact nothing to entitle it to the preference. An inferior sort is manufactured, by

adding a few drops of a liquor obtained from the decoction of elder-berries with cream of tartar, which is called *vin de Fimes*, from the town where it is prepared.

In making the RED wines, the grapes are trodden before they are introduced into the vat: sometimes the treading is repeated during the fermentation; the murk is covered with a board, and a layer of straw is commonly employed to protect the head from the contact of the atmospherical air. The wines of the higher grounds are generally put into bottles in the month of November following the vintage; but the produce of the Clos St. Thierry will improve by being allowed to remain on its lees a year or two longer. When these wines are bottled in spring, they are apt to retain a slight degree of fermentation, and to have a very disagreeable taste.

All these wines, when well made, and placed in cool cellars, will retain their good qualities from ten to twenty years. The creaming wine of Ay has been known to keep, and continue to improve, even for a longer period; acquiring only that slight bitterness which characterizes all old wines. The vaults in which they are stored, at Reims, Epernay, Avise, &c. are excavated in a rock of calcareous tufa to the depth of thirty or forty feet. In those of M. MOËT, at Epernay, which are the best, as well as the most extensive, the thermometer generally indicates a temperature of fifty-four degrees of Fahrenheit, and the variation from winter to summer does not amount to one degree.

It is almost unnecessary to observe, that the briskest wines keep the worst. This property is liable to be affected by several causes, such as exposure to air, the position in the cellar, the quality of the glass of which the bottles are made, and various other circumstances, which are often very difficult to determine.

The white wines of Arbois and Papillon, in the department of the Jura, resemble those of Champagne in many of their qualities; but they are not managed with the same care, and do not equal

the first-rate growths of the latter district, being generally muddy and ropy. From some anecdotes which SULLY has recorded of HENRY IV., it appears that the Arbois was a favourite wine of that monarch.

SECTION II.

OF THE WINES OF BURGUNDY.

TOWARDS the beginning of the last century, a ridiculous controversy arose in the schools, in consequence of a candidate for medical honours choosing to maintain, in his inaugural thesis, that the wines of Burgundy were preferable to those of Champagne; and that the latter were irritating to the nerves, and productive of dangerous disorders, but particularly of gout. Such an opinion, finding adherents, could not fail to produce a considerable sensation, especially in the province most interested in the decision of the question. The Faculty of Medicine at Reims accordingly took up the defence of the Champagne wines, eulogizing their purity and brightness of colour, their exquisite flavour and perfume, their great durability, and their general superiority to the growths of Burgundy. This attack on the merits of the latter produced a rejoinder from the pen of a professor of the college of Beaune; and a regular paper war commenced, in verse as well as prose, which was waged with much warmth on both sides, according to the respective interests, tastes, or fancies of the combatants, till the attention of the public was diverted from the nugatory contest by the national disasters that marked the close of LEWIS the Fourteenth's reign°. The discussion, however, was after-

° Vie Privée des Français, Tom. III. p. 39—45. Théâtre d'Agriculture d'Olivier de Serres (Ed. 1814), Tom. I. p. 385.

wards continued at intervals, until the year 1778, when, in a thesis defended before the Faculty of Medicine of Paris, a verdict was ultimately pronounced in favour of the vintages of Champagne.

It is, however, sufficiently certain, that the growths of Burgundy must, in some respects, be considered as the more perfect of the two. In richness of flavour and perfume, and all the more delicate qualities of the juice of the grape, they unquestionably rank as the first in the world; and it was not without reason that the dukes of Burgundy, in former times, were designated as the *princes des bons vins*. They are produced in the greatest variety, abundance, and excellence, in the departments of the Côte d'Or, Yonne, and Saône and Loire, known in former times under the appellations of Upper and Lower Burgundy; but as several of the vintages of the adjacent districts, particularly those of the Beaujolais and a portion of Champagne, resemble the Burgundy wines in quality, and are sometimes drunk as such by insufficient judges, they may be all comprehended under the present section.

The soils on which these valuable wines are grown, consist, in general, of a light black or red loam, mixed with the debris of the calcareous rocks on which they repose. The principal vineyards of the Côte d'Or are all situated between Dijon and Chagny, and describe an arch of a large circle, exposed to the south-east, and protected from the north-west wind by the range of hills that stretches behind them. But all of them are not so favourably placed. The Clos-Vougeot advances considerably into the plain, and faces the east; while several of the best vineyards of Nuits and Beaune lie towards the west. It is, therefore, to the superior skill with which the cultivation of the vines and fermentation of the grapes are managed, that the highly generous qualities of the wines are chiefly to be ascribed. The truth of this observation will become more apparent from the history of some of the most celebrated growths of this province. The wine of Beaune, for example, which for many centuries was considered as the most choice of all, and

the enjoyment of which, if we may credit the insinuation of PETRARCH, was one of the motives which tended to prolong the residence of the papal court at Avignon[p], must now be placed in the second rank; while the Romanée Conti, which formerly was in no great repute, has become one of the most precious growths of Upper Burgundy, in consequence of the improvements in its manufacture, which were introduced by a German officer, named CRONAMBURG, who, about the year 1730, married the heiress of the vineyard.

The vines are planted in trenches, at the distance of about two feet apart, and are trained on poles to the height of thirty or forty inches. They are renewed by means of *provins*, and in the best vineyards are extremely old. The plant which gives the choicest wine is that known by the name of *pineau;* while the *gamet*, which is more productive, furnishes a large proportion of the ordinary kinds. The grapes are freed from the stalks, but are seldom trodden, before they are introduced into the vat. Until very lately, the practice of covering the vat was scarcely known. As the chief excellence of the wines of this district consists in the fulness of their flavour and perfume, it is obvious, that the fermentation should be conducted with a view to the most complete preservation of the aroma. Hence the lighter wines, called *vins de primeur*, such as Pomard, Volnay, &c., are allowed to remain in the vat only from twenty to thirty hours: but this fermentation is sufficient to decompose nearly the whole of the saccharine principle of the must, and these wines are accordingly fit for drinking in the second or third year after the vintage. However, as they still contain a quantity of uncombined extractive matter, they are very liable to spoil, especially when exported on the lees. Indeed, it may be laid down as an axiom, that none of the finer Burgundy wines will bear removal except in bottle; and, even in the bottle, they are apt to contract

[p] Epist. Senil. lib. vii.

a bitter taste, or turn sour, unless they are kept with the greatest care.

In England, we have, in general, a very imperfect idea of the great variety and excellence of the wines which this province produces, as it is customary to comprehend them all under the generic term *Burgundy;* and as the prime growths are confined to a few favoured vineyards, and are in great request in their own country, it is evident that but a small proportion of them can ever come into the market. Supposing, therefore, our wine-merchants chose to give the high prices at which such wines sell, they could not obtain a sufficient supply: but the high and impolitic duty on French wines renders it their interest to limit their orders, for the most part, to inferior qualities; or, if they should commission the best, it is still not unlikely, that the French wine-dealer, unable to meet the demand, and unwilling to disappoint his rich, but not very skilful, foreign customers, might be induced to send second-rate wine, which, with persons habituated to the duller liquors of Spain and Portugal, may seem of the very finest quality. Nor does this statement rest altogether on supposition; for we are told by JULLIEN, that the ordinary wines of first and second quality,—the inferior produce of the vineyards of Vosne, Nuits, Volnay, Pomard, Beaune, Chambolle, and Morey, are often exported, under the denomination of the best, to those countries where the first qualities are not duly appreciated[q]; and, indeed, the practice in question is notorious, not only in Burgundy, but in all parts of the world where wine forms an article of commerce.

The choice RED growths, in the Côte d'Or, are the Romanée Conti, Clos-Vougeot, Chambertin, Richebourg, Romanée de Saint Vivant, Tache, and St. George. These, with the exception of the Chambertin, are all produced in the territories of Nuits and Vosne, and are distinguished by their beautiful colour and exquisite flavour

[q] Topographie de tous les Vignobles, p. 112.

and aroma,—combining, in a greater degree than any other wines, the qualities of lightness and delicacy with richness and fulness of body. In common with the remaining Burgundy wines, they have a peculiar vinous pungency, which may be occasionally perceived in some of the more perfect Italian and Spanish light wines, but which, at the same time, is altogether distinct from the sharpness that belongs to the *vini piccanti*, properly so called; the latter being of a more acidulous nature.

As the Romanée Conti is grown in very small quantity, on a spot which is only six and a half English acres in extent, it is seldom met with in a genuine state; and there is reason to believe, that the produce of the vineyard of Romanée St. Vivant, so called from the monastery of that name, which is more abundant, and of a similar though inferior quality, is often sold for it. The Clos-Vougeot, on the other hand, is of much greater extent (about eighty English acres); and the wine which it yields, used at one time to fetch the highest price of any throughout this province: but its reputation, as already observed, has greatly declined since the old vines have been extirpated, and replaced by others, which afford a larger crop, but of worse quality. In favourable years, the quantity may be estimated at three hundred hogsheads. Although the ground rises very gently, there used to be a considerable difference in the value of the produce, according to the part of the vineyard in which the grapes were gathered; the wine made from those in the middle selling for one-third more than that made from those in the upper part, and three times as much as that made from those at the lower end. This celebrated domain was purchased during the Revolution by the house of Tourton and Ravel of Paris, at a million of francs, or about five hundred pounds the English acre. It has been lately resold to Mr. Ouvrard. In order to preserve the reputation of their wines, Messrs. Tourton and Co. wisely made it a rule to export them only in bottle: but they have not kept up the marked distinction of qualities that existed in the time of the monks; and

it will be long before they can regain their former character. At present the wine of the Clos-Vougeot may be considered as the third or fourth growth. It is more spirituous, but greatly inferior in delicacy of flavour and aroma to the Romanée.

Rivalling the latter in some respects, and surpassing it in others, though upon the whole inferior, the Chambertin ranks next. It is the produce of the vineyard of that name, situated seven miles to the south of Dijon, and furnishing every year, from one hundred and thirty to one hundred and fifty puncheons, from an extent of about sixty-five acres. It has a fuller body and colour, and greater durability than the Romanée, with an aroma nearly as fragrant. LOUIS XIV. is said to have been partial to this growth; and it is mentioned by a late writer as having been also the favourite wine of NAPOLEON. The Richebourg, Tache, and St. George, approach to the Chambertin in their more essential qualities; and, when made in favourable seasons, keep extremely well. The vineyards of Musigny, Clos de Prémeau, Clos du Tart, Veroilles, Clos-Morjot, Clos St. Jean, and Perrière, also furnish wines of nearly equal excellence; but as the quantity is very limited, they are not much known out of Burgundy. Some obtained by Mr. MONTMORT, from his vineyard at Fissin, in the vicinity of Dijon, is even said to surpass all the other growths of the Côte d'Or, and has been sold on the spot at the enormous price of twelve francs the bottle.

The *vins de primeur* belong to the second class of the fine RED wines of this district. Of these the Volnay and Pomard are the principal; the former being characterized by its light and grateful aroma and delicate tint,—the latter having more body and colour. They are both produced in the neighbourhood of Beaune.

Among the stronger wines, those of Corton, Vosne, and Nuits, may be regarded as little inferior to the produce of the Clos St. George: they are seldom fit for drinking till the third or fourth year after the vintage, but bear carriage well, and acquire a high flavour when old. The last-mentioned, which was extolled by the

champion of the Burgundy wines, in the controversy formerly noticed, as a wine, " qui n'a pas son pareil, et ne peut être assez prisé," is reported to have owed its high repute principally to the circumstance of having been prescribed as a restorative to Louis XIV. in the illness with which he was seized in the year 1680. The growths of Vosne are particularly esteemed for their delicacy.

Of the wines supplied by the numerous vineyards in the immediate vicinity of Beaune, several are scarcely inferior to the Volnay and Pomard. They are thought to have the purest flavour of all the Burgundy wines; but, as already hinted, can no longer rank among those of the first class.

Chambolle, three leagues from Nuits; Morey, near Gevrey; and some of the vineyards of Savigny-sous-Beaune, and Meurseault, one league and three quarters from Beaune, all give excellent wines, that approach more or less to the first growths.

The same chain of hills that overhangs the rich vineyards of the Côte d'Or, extends through the department of the Saône and Loire, and the Beaujolais, towards the banks of the Rhone, presenting along its base a great variety of favourable exposures for the growth of the vine: but, either from some inferiority in the soil, or from other unknown causes, the wines produced in the last-mentioned districts do not equal those of the Côte d'Or, being deficient in the full aroma and flavour that characterize the latter, and give them a preference to all other growths. In the qualities of strength and durability, however, they are sometimes superior; and, in general, they may be regarded as occupying the rank next to the Beaune wines. In commerce they are commonly known by the appellation of Mâcon wines; and under this name are comprehended not only the growths of the Mâconnais, but also the chief wines of the Beaujolais, forming part of the department of the Rhone. Those of Romanèche, and of Torins, in the vicinity of Mâcon, in particular, are esteemed for their delicacy, sprightliness, and agreeable flavour: that of Chenas, in the canton of Beaujeu,

on the other hand, is a more spirituous and fuller wine, and will bear keeping three or four years in the wood. Of these wines the best are grown on a granitic soil. Formerly the plant called *chanay*, which produces a very small grape, and yields an excellent wine, was in general cultivation here; but the cupidity of the farmers has led to the substitution of the *bourguignon*, in which, as usual, quality is exchanged for quantity.

The department of the Yonne, which is composed of Lower Burgundy and a portion of Champagne, furnishes several excellent red wines, of which those of Tonnerre and Auxerre have been long celebrated. In the former district, the vineyards Des Olivotes, Pitoy, Perrière, and Préaux, are chiefly deserving of mention. At Auxerre, the Clos de la Chainette yields the finest and most generous wine; while the neighbouring vineyard of Migrenne, of which part belonged to the bishops of Auxerre, gives a liquor of greater spirit and body, and thence better calculated to bear carriage. Accordingly, in former times, it was much exported to England and Italy. In general, however, the wines of the Auxerrois are inferior in point of strength to those of Tonnerre, which are seldom fit for bottling till they have remained three or four years in the cask, and by many are thought too heating.

The WHITE wines of Burgundy are less numerous, and consequently less generally known than the red; but, nevertheless, maintain the highest rank among the French white wines, and are not inferior to the red either in aroma or flavour. At Poligny, in the canton of Nolay, two leagues and a half to the south-east of Beaune, is grown the famous Mont Rachet wine, surpassing all other white wines of the Côte d'Or by its high perfume and agreeable nutty flavour. But in the Mont Rachet the same variations of quality are observable as in the Clos-Vougeot, and it is distinguished by the several names of Mont Rachet *Aîné*, *Chevalier* Mont Rachet, and *Bâtard* Mont Rachet; of which the last sells for only one-third of the price of the first. Yet these three qualities

are produced from vineyards, which are only separated from one another by a footpath; which have the same exposure, and apparently the same soil; in which the same species of vines are cultivated; and which are managed in every respect precisely in the same manner. Latterly some proprietors of vineyards at Nuits have manufactured a white wine from red grapes, which is said to bear comparison with the finest growths of Champagne.

To the second class belong the white wines of La Perrière, La Combotte, La Goutte d'Or, La Genevrière, and Les Charmes, all situated in the territory of Meursault; of which several, but especially the first mentioned, vie with the secondary growths of Mont Rachet. The vineyards of Vaumorillon and Les Grisées, in the district of Tonnerre; of Valmur, Grenouilles, Vaudesir, Bouguereau, and Mont de Milieu, in the vicinity of Chablis; and of Pouilly and Fuissey, near Mâcon, afford the best white wines of the other departments.

It is usual to bottle the white wines of Burgundy from one year to eighteen months after the vintage. When old, they generally acquire an amber colour; and the *Goutte d'Or* of Meursault derives its name from the splendour of its tint, and is, perhaps, of all wines, that which is most affected in its colour by the contact of the atmosphere. Sometimes these wines, after they have been put into bottle, lose their brightness and purity of flavour; but this disorder is, in general, only temporary, and subsides spontaneously in the course of a few months.

SECTION III.

OF THE WINES OF DAUPHINY, THE LYONAIS, AND THE COUNTY OF AVIGNON.

ON the banks of the Rhone, after its junction with the Saone, and in the adjacent territories, several precious wines are produced; but, although the vineyards in these departments may be regarded as among the most ancient in France, yet it is only in recent times that the merits of their choicest produce have become fully known. The wines of Vienne and the Vivarois are oftener than once alluded to by PLINY. Until the middle of the seventeenth century, however, no mention is made of those of Condrieux and the Hermitage, and the fame of the Côte Rôtie appears to be of still later date. At present the two last-mentioned are universally acknowledged to rank among the best French wines; and the former, in particular, is preferred by many connoisseurs to all other growths.

On the granite hill, which rises to an elevation of five or six hundred feet, immediately behind the town of Tain, on the left bank of the Rhone, and twelve miles from Valence, are the famous vineyards of the Hermitage. A ravine divides the southern bank into two nearly equal portions. In the western half, which is surmounted by the ruins of a hermitage, the rock is more compact, and exhibits a larger proportion of feldspar, than on the eastern side, where it is loose and friable. In the upper and middle regions, the soil consists almost entirely of the mouldering granite; but near the base there is an admixture of pebbles, and the lowest part,

called the *sabot*, is composed of fluviatile sand. In one or two places, small veins of limestone are observable. Nothing can be finer than the exposure; as the whole of the slope faces the south, and, with the exception of the east side of the ravine, enjoys the full benefit of the sun's rays during the greater part of the day. The inclination, however, is so steep, that it has been found necessary to form part of it into terraces. The west side, which is most rocky, gives the strongest wine; the east, and especially that division of it where the pebbles appear, the most delicate. The plants cultivated for the red wines are the great and small *siras;* and, for the white, the *marsanne* and *roussanne*. They grow without stakes, and are pruned about eighteen inches from the ground. All the grapes are small. The annual produce of the several vineyards on the bank amounts to from fifteen to eighteen hundred hogsheads.

The red grapes, when brought from the vineyard, are freed from the stalks, by means of wooden rakes, in a grated trough, which is placed over the vat. When the fermentation has continued three or four days, and the crust begins to subside, the treading is sometimes repeated in the vat, and the fermentation allowed to continue five or six days longer. The vats commonly used are of large dimensions; some of them containing as much as eighty or a hundred hogsheads. Hitherto it has not been usual to cover them; and there can be little doubt, that the acescency to which the Hermitage red wines are so liable, is, in some measure, attributable to this neglect. During the long fermentation which they undergo, and which, from the large quantity of the liquor, and the warmth of the climate, must be often violent, there is also some loss of alcohol and aroma. The slovenly practice of treading in the vat, though it may be favourable to the colour, must always be prejudicial to the more delicate qualities of the wine.

Of the RED wines, the produce of the vineyards of Méal and Greffieux, and, next to them, those of Bessas, Baume, and Raucoule, are the most esteemed. When genuine, they are distinguished by

their full body, dark purple colour, and exquisite flavour and perfume, which is not unaptly compared to that of the raspberry. As they deposit a large quantity of tartar, they ought not to be bottled till after they have been allowed to mellow eight or ten years in the cask: in bottle they keep long, and it is only then that their more delicate qualities become fully developed. The vintages of Crozes, Gervant, and Merceurol, in the neighbourhood of the Hermitage, approach, in a certain degree, to the better growths of the district, but yield to them in point of flavour and delicacy.

In the department of the Rhone, which includes the lower portion of the Lyonais, the wines of Côte Rôtie take the lead. They are the produce of the terraced vineyards which have been formed on the southern declivity of the hill to the west of Ampuis, on the right bank of the Rhone, and seven leagues from the town of Lyon, and which are divided into the Côte Rôtie *brune*, and Côte Rôtie *blonde*. In flavour and perfume they resemble the Hermitage more than any other growth, which may perhaps be owing to the similarity of the strata on which they are produced; but, in point of strength and body, are inferior. When of good quality, however, they keep extremely well. To give them sufficient maturity, they should not be bottled till the sixth or seventh year. At Verinay, in the same territory, wines resembling, and passing under the name of Côte Rôtie, are made in considerable quantity. Those of Seyssuel, on the opposite bank of the river, at one league from Vienne, recommend themselves by their sprightliness and flavour, and agreeable violet-perfume.

The department of Vaucluse furnishes a few growths, which may be considered as analogous to those last described; but, in consequence of the bad methods which are followed in the manufacture, the greater part of the produce is inferior. The vines are allowed to grow to a much greater height than at the Hermitage, and a variety of species are cultivated indiscriminately. The grapes are

all gathered at once; and in some places, before they are removed from the field, are freed from the stalks, in the tubs in which they are collected, — a practice which is highly objectionable, as the fermentation will almost always commence before they reach the cellar. The vats are commonly of mason-work, and are used without covers. At Châteauneuf, six miles above Avignon, where the vines are very old, the best wine is made. It has a delicate flavour, and ripens in about four years. The produce of Lanerte, on the brow of the same hill, a little farther east, is more spirituous and durable. The wine of the Côteau brulé, which has been much improved of late years by the judicious management of the present possessor of the vineyard, may be compared to light Port. At Sorgues and Gadagne, some good kinds are obtained.

Among the WHITE wines of the Rhone, the growths of the Hermitage also occupy the first place. They are the driest of all the French wines, and have much spirit and richness of body, a powerful aroma, and a peculiar flinty taste: when long kept, they assume an amber tint. It would appear, indeed, that they abound in mucous or extractive matter; for, when exposed to the air, they quickly change colour, and acquire an unpleasant flavour. They are all fermented in small casks, in which they are allowed to remain for a month or six weeks. When clear, they are drawn off, and they are afterwards racked once or twice during the winter. At the end of four years they are put into bottles. White grapes alone are used in the manufacture of them. A small quantity of sweet wine is made from the ripest grapes, which are hung up, or spread upon straw, for six or eight weeks, or until they become half-dried. The liquor obtained from them, which, from the mode of preparation, receives the name of STRAW WINE (*vin de paille*), is exceedingly luscious, and, in flavour and aroma, very closely resembles the best Constantia.

At Château-Grillet, and Condrieux, eight leagues below Lyon, some very good white wines, both sweet and dry, are produced,

which are occasionally met with in this country; and a wine, not unlike that of Marsala, is obtained from the vineyards of the Côte Rôtie. Being of a rich and strong body, they improve by long keeping. The *clarette* of Die, on the other hand, is a light sparkling liquor, of a delicate flavour, but not of durable quality.

SECTION IV.

OF THE WINES OF LANGUEDOC, ROUSSILLON, AND PROVENCE.

S we approach the shores of the Mediterranean, we find the vine flourishing, and displaying its choicest fruit, under circumstances in which it can with difficulty be brought to bear in the departments of the north, — growing vigorously in the freest exposures, or under the shade of trees, spreading its branches wide around, and adorning the landscape with its luxuriant foliage. "Nothing," says DUSSIEUX, "can be more picturesque than the prospect which the lofty vines of Provence present to our view. The traveller, who is unaccustomed to this sort of plantation, surveys with delight the various productions of the soil, where every thing bespeaks the symmetrical order of a garden. In one place a range of olive trees forms a sort of espalier; and the pale green of their leaves presents an agreeable contrast to the more lively hue of the corn that grows at their feet. A little farther on, the vine forms another espalier, or appears in close plantation. Some marry it with the almond, or the elm; and its shoots, intermixing with their branches, compose various wild and tufted heads: others, again, leave it without any prop; and, in a fertile soil, it sends forth vigorous shoots, which entwine round one another. This mixture of different crops has a

charming appearance to the eye; but how many errors are here described in few words!"[r] In those parts of Languedoc and Roussillon, however, where the best wines are grown, the last-mentioned mode of culture is adopted; the vines being planted in rows from three to six feet asunder, and left without stakes, as the strength of the branches is generally sufficient to support the fruit. In some places, spade-husbandry is used; in others, the land is ploughed in furrows between the rows. Where the soil is rich, as is commonly the case in the low grounds, the foliage becomes so dense, as to present an uniform expanse of verdure: but on the hills, where the vegetation is less exuberant, the sun's rays penetrate freely to the plant; and as it is pruned to within a foot or eighteen inches from the root, and sometimes even much lower, the grapes there attain their utmost maturity. The soils are, for the most part, either calcareous or gravelly.

With so many advantages in their favour, the wines of these territories might be expected to rival or surpass the first-rate growths of the more northern departments; yet neither Languedoc, nor Provence, nor Roussillon, produces any red wine which can enter into competition with the best vintages of the Hermitage, or of the Côte d'Or; and it is only in the class of sweet white wines, which are obtained from the richest and ripest grapes, that their superiority becomes apparent. The red wines, it is true, are of a strong and full body, yielding the largest proportion of alcohol, and possessing a great degree of durability; but they are commonly thick and heavy, and almost always deficient in the finer characters of flavour and aroma, which are, in a great measure, sacrificed, in order to ensure the complete development of the colouring matter. If the buyers and consumers could be persuaded to forego this consideration, and to believe, that a claret, or rose-coloured wine, when well manufactured, may be better than a black or deep purple liquor,

[r] Traité sur la Culture de la Vigne, Tom. I. p. 289.

the qualities would be greatly improved; and, in point of fact, some of the most agreeable wines which Languedoc furnishes are of that description. The use of new methods, indeed, may enable the manufacturer to combine all these requisites; and, from the attention which has been lately bestowed on the subject, there is reason to think, that, in the course of a few years, all the wines of the south will be much ameliorated, and acquire that distinction among the growths of France, to which the excellence of the soil and climate in which they are produced ought naturally to raise them.

Of the RED wines of Languedoc, those of Tavel, Chuzclan, St. Geniez, Lirac, and St. Laurence, in the vicinity of Roquemaure, and those of Beaucaire, on the Rhone, are deservedly esteemed for their delicate flavour and aroma. They vary somewhat in colour; but the best of them, such as the Tavel, Chuzclan, and Beaucaire wines, have a bright rose tint. The last-mentioned is generally known by the name of *Cante-perdrix*, and under that denomination figures in RABELAIS' list of wines. The produce of Cornas, about six miles from Tournon, is of a stronger quality; being a full and rich-coloured wine, with a flavour of ratafia, which will keep, and continue to improve, for eighteen or twenty years. The vineyards of St. Joseph, in the same neighbourhood, furnish some growths that approach to it in quality, but they are less firm. Those of St. George d'Orques, a few miles west of Montpellier, give a good table wine, resembling in flavour that of the Côteau-brulé, near Avignon, but inferior to all the others above enumerated.

The red wines of Roussillon, on the other hand, are distinguished by their great body and colour, and are generally regarded as the strongest and most durable of any that France produces: hence they are much used for distillation, and for strengthening the lighter growths of the Bordelais. The wines of Bagnols, Cosperon, and Collioure, to the east and north-east of Ceret, as well as those of Toremila and Terrats, three leagues to the west of Perpignan, are among the choicest. When old, they become more or less tawny.

and acquire what the Spaniards call a rancid taste; but they are not less valued on that account. In favourable years, they have all the richness of the Alicant wines. Before they are exported, it is usual to add to them a small quantity of brandy.

Scarcely any of the red wines of Provence are deserving of particular notice, being mostly of very ordinary quality. Even when kept for six or seven years, they retain an unpleasant harshness, and their flavour is by no means to be compared to that of the growths of the upper banks of the Rhone. If we may judge from the specimens which the vineyards around Marseilles now supply, we must allow, that it was not without reason that MARTIAL inveighed so bitterly against the produce of that territory. Its white and sweet wines, indeed, are of a somewhat higher order; but they, too, must yield to the rich liquors which the adjoining districts furnish.

In the class of DRY WHITE wines, those of St. Peray, on the banks of the Rhone, nearly opposite to Valence, and three leagues below Tournon, are decidedly the best of the growths of Languedoc. They are characterized by their delicacy and sprightliness, and a flavour that partakes of the odour of the violet. When bottled in the spring following the vintage, they sparkle and froth, like the wines of Champagne. The white wines of St. Jean, at one league from Tournon, are of similar quality, and in equal estimation. In the country they are commonly known by the name of *vins de cotillon*. The produce of St. Peray is reckoned at from two to three hundred hogsheads.

It is on the coast of the Mediterranean that the choicest MUSCADINE wines are grown; viz. at Frontignan, Lunel, and Beziers, in Languedoc,—and at Rivesaltes and Salces, in the province of Roussillon. The soils of some of these territories are believed to be of volcanic origin. On the higher grounds, for example, above the town of Frontignan, the surface presents nothing but a congeries of fragments of the calcareous rock, of which the neighbouring

strata are composed, with a small admixture of red argillaceous earth; and the vicinity of the Etang de Thau, which has the appearance of having been once the crater of a volcano, renders it not improbable, that these stones were showered down at the time of the eruptions. The lands in question take the name of *garigues*, and seem to have been formerly much more extensively covered with vineyards than at present; for it is only towards the base of the ridge that they are now cultivated, the upper plantations having been abandoned. They have a fine south-eastern aspect, and are well sheltered from the north and west by the chain of hills immediately behind them. The vines are planted about five feet asunder, and are kept low, and without props. Most of the plants are very old. Though the grapes ripen early, they are never gathered till the greater portion of them become shrivelled and half-dried; acquiring, in this way, a deep brown colour, like raisins. A few plants of the black muscat species are observable; but, in most of the vineyards, the white predominates.

The Frontignan wine is known from all others by the very marked flavour of the grape from which it is obtained: yet that flavour can scarcely be distinguished in the more shrivelled grapes, and is probably owing to an intermixture with others that are in a less advanced state. When the wine is old, the taste of the fruit becomes less perceptible, but the flavour continues always exceedingly luscious. The aroma has been compared to that of the elder flower. The whole produce is calculated at fifteen hundred hogsheads; but this estimate is probably exaggerated.

Some persons give the preference to the muscadine of Lunel, which is grown in vineyards situated on the gently rising ground, to the north of the town of that name. It is a very delicate wine, of a bright yellow colour, with a less distinct flavour of the grape, and less cloying, than the Frontignan. M. Gautier, whose vineyard, called the Clos-Mazet, has been long known to afford the first-rate growth, makes about a hundred hogsheads yearly, being

one-third of the total quantity supplied from the territory of Lunel. Several of the more ordinary muscadine wines, however, come into the market as Frontignan and Lunel; but they may be easily detected by their deeper colour, and the want of the characteristic flavour and perfume.

The country around Beziers abounds in this class of wines. Those of Maraussan, Cazouls, and Bassan, in the more immediate vicinity of the town, are the best; and may be rated as equal to the secondary growths of the Frontignan vineyards. Pomerols and Marseillan, at five or six leagues from Beziers, also furnish a considerable supply of an inferior quality, generally sold under the designation of *picardan de la marine*, and *picardan de la montagne*, from the name of the grape with which they are made, and the respective situations in which they grow. They possess considerable body, have much of the flavour of the fruit, and keep and bear carriage perfectly well. When old, they become dry, and approach to some of the Spanish white wines; sometimes receiving, like them, an addition of brandy previously to exportation, although they are naturally strong.

Two leagues east from Perpignan is the celebrated vineyard of Rivesaltes, which gives the best muscadine wine, not only in Roussillon, but in France, or, perhaps, in the whole world; for it is much more perfect of its kind than many others to which an undue degree of excellence is ascribed, merely because they come to us from a great distance, and are remarkable for their rarity and costliness. When sufficiently matured by age, it is of a bright golden colour, and has an oily smoothness, a fragrant aroma, and a delicate flavour of the quince, by which it is distinguished from all other sweet wines. The quantity produced does not exceed two hundred hogsheads. At Salces, a few miles further to the north-east, a white wine is grown, which, from the grape that yields it, gets the name of *maccabec*, and is thought to resemble Tokay; but, in point of richness, it is inferior to the Rivesaltes. Besides the growths above enumerated,

the vineyards of Bagnols sur Mer, Collioure, and Cosperon, supply some red sweet wines called *grenache*, from a Spanish grape that is much cultivated in these districts. At first they are high-coloured, and somewhat rough; but, when kept a few years, become lighter and milder, and approach in flavour to the wines of Rota.

SECTION V.

OF THE WINES OF GASCONY AND GUIENNE.

THE vineyards of the Bordelais are divided into those of Medoc, Graves, Palus, and Vignes Blanches, which furnish the wines of prime quality: to these may be added the territories of Entre-deux-Mers, Bourgeais, and Saint Emilion, the growths of which are of secondary order.

About thirteen leagues to the north of Bordeaux, the Medoc wine district commences. It extends along the left bank of the rivers Gironde and Garonne, as far as Blancfort, which is two and a half leagues below Bordeaux, and comprehends the most celebrated growths of the country, such as Lafitte and Latour, Leoville, Château Margaux, and Rauzan. The soils are, for the most part, composed of red sand or gravel, with a mixture of calcareous loam. The vines are planted in the quincunx form, at the distance of three feet from one another; and are supported on low frames, formed of upright props, about twelve inches high, and horizontal poles, on which the branches are allowed to extend. Between the rows the land is ploughed by oxen; which saves expense, but is attended with this inconvenience, that it prevents a late dressing. The species most generally cultivated is the *verdot*. The vineyard of Latour,

which gives the strongest wine of Medoc, at least among the first growths, lies on a gently rising ground immediately above Pauillac. As it is nearer the river, the soil is probably richer than that of Lafitte, which produces the lightest of the choice Medoc wines. In the upper part of the latter property, the land is gravelly: in the lower, the gravel is mixed with a preponderance of sand and black earth. Yet the excellence of the best growths can hardly be referred to the presence of the gravel alone; for, in the adjoining territory of St. Estephe, the wine of which sells for only one-fifth or one-sixth the price of that of Lafitte, the same gravelly soil presents itself. Nor can the superiority of the produce be satisfactorily accounted for by the exposure any more than by the nature of the soil; for the wine of Bran-mouton, which has a similar aspect, and is divided from Lafitte only by a narrow footpath, sells for one-third less. In the latter vineyard, however, the quality of the soil appears to be somewhat stronger. The quantity of land appropriated to the vine at Lafitte amounts to 180 *journals* of 840 toises each. In good years, it yields 150 tuns, or 600 hogsheads. A short time since, the property was purchased by an English mercantile house, for the sum, it is said, of 1,400,000 francs, or 60,000 pounds. The best wines are obtained from the vineyards bordering upon the river.

The *Graves* are so termed from the nature of the soil which produces them. Formerly the appellation was confined to the white sorts; but it now comprehends the red as well as white wines which grow on the gravelly lands to the south-east and south-west of Bordeaux. The Haut-Brion ranks highest among the red wines, and approaches in quality to some of the better sorts of Burgundy; but it wants the fine perfume by which the Medoc wines are distinguished. Next to it, the red wines of Haut-Talance and Merignac claim precedence.

From Castres, four leagues south of Bordeaux, along the left bank of the Garonne, as far as Langon, and descending the river, on the side opposite the last-mentioned place, to about the same

distance, is a succession of vineyards, producing some of the best white wines; but the growths of the left bank are far superior to those of the right, although the exposures on the latter would appear to be the most favourable. This probably arises from the difference of soil, which in the one is a fine gravel or quartzose sand, while in the other it consists of nothing but argillaceous loam, mixed with fragments of calcareous rock. At Barsac, for instance, the ground is nearly level; yet the wine produced from it sells for one-third more than that grown at St. Croix du Mont, on the opposite bank, where the vines are planted on a slope of about thirty-five degrees, with a south-western aspect, and where the substrata are of precisely the same nature. The plants chiefly cultivated for the white wines are the *sauvignon*, *rezinot*, and *semillon*: about three feet are allowed between each stock; and they are trained on poles to the height of five or six feet. They are propagated either by quicksets, or by layers.

The soils of the Palus, on the other hand, are wholly alluvial, being formed by the successive deposits of the rivers Garogne and Dordogne, between which they are situated. In this rich ground, the vines naturally shoot forth with great luxuriance. They are allowed to rise to the height of six feet, and are supported by stakes, of which there are generally three to each plant. Here, as well as in Medoc, the best species of grape is the *verdot*. Of late, however, many plants of the *malbec* have been introduced, which is more prolific, but of inferior quality; and the wine has consequently degenerated. The growths of this district are of a deep colour and strong body, but hard and rough, when new. They are known under the name of *vins de cargaison*, because they are well adapted for sea carriage, and chiefly sent to the East Indies; but they are often employed to give strength to the weaker Medoc wines.

Of the vineyards of secondary rank, those of Bourg, Blaye, Canon, and Saint Emilion, are principally deserving of notice. In former times the wines of Bourg were in greater demand than those

of Medoc, and, next to the Graves, they are still the most esteemed of the Bordelais growths.

The average produce of all these territories is estimated at 58,000,000 gallons; of which from 8 to 10,000,000 gallons are consumed by the inhabitants, and an equal quantity is converted into brandy. The remainder is exported[s].

The management of the vintage varies in the different districts. For all the better wines, the fruit is picked with great care; but the red grapes are picked in a different manner from the white. All the rotten or unripe red grapes are rejected, while the rotten part of the white is retained; and, indeed, the latter are seldom gathered till they have become over-ripe. With such nicety is this operation performed in some districts, as at St. Croix, Loupiac, &c., that the vintage often lasts for two months. In Medoc, there are generally two pickings for the red wines; at Langon, three or four for the white wines; at St. Croix, five or six; at Langoiran, two or three; and two, throughout the Graves. In making the best Medoc wines, the grapes are carefully freed from the stalks. For several years it has been customary at Lafitte, and some other places, to introduce the grapes into the vat without being trodden. Contrary to what might be anticipated, the wine thus made is found to be more highly coloured than that which is manufactured in the ordinary way; the fermentation, however, must be rather slower, and less equal: but the great advantage of this mode of procedure is, that it gives a liquor much freer from lees. The vats are covered with boards. In the Palus, on the other hand, the grapes are freed from the stalks in troughs, and then trodden, before they are put into the vat, which is usually left open. No precise period is fixed for the fermentation. For the white wines the grapes are slightly trodden, and partially freed from the stalks; they are then pressed, and the must that flows from them is conveyed in buckets to the

[s] See Appendix, No. IV.

foudres, or large casks, containing from eight to twelve tuns, where it is allowed to ferment. When the wine appears sufficiently clear, it is drawn off into clean vessels, which are filled up, at first, every two or three days, then once a month, and afterwards every three months, at least.

The excellence of the Bordelais growths has been celebrated by AUSONIUS; and there is, perhaps, no class of wines which has maintained its ancient repute more uniformly. At present they unquestionably rank as the most perfect which France produces; and as they keep extremely well, and are even improved by sea carriage, they are freely exported to all parts of the world. Though the quantity of alcohol which the finer sorts contain is inconsiderable, yet, as the original fermentation is usually very complete, and the subsequent management judicious, they are much less disposed to acidity, and other disorders, than the wines of Burgundy. The red growths are in greater demand, and have always fetched higher prices, than the white; but, for some years, the latter have been advancing in estimation and value; and, generally speaking, may be said to come to us in a more genuine state than the red wines, which are too often subjected to various processes by the merchants of Bordeaux, with the view of preparing and adapting them for particular markets. Thus the strong rough growths of the Palus, and other districts, are frequently bought up, as has been already mentioned, for the purpose of strengthening the ordinary wines of Medoc; and there is even a particular manufacture, called *travail à l'Anglaise*, which consists in adding to each hogshead of Bordeaux wine three or four gallons of Alicant or Benicarlo, half a gallon of stum wine, and sometimes a small quantity of Hermitage. This mixture undergoes a slight degree of fermentation; and, when the whole is sufficiently fretted in, it is exported under the name of CLARET. A great proportion of the wine, however, which is drunk under this denomination, is nothing but the *vin ordinaire*, or, at best, the secondary growths of the country; for the prime growths fall far

short of the demand which prevails for these wines, not only in this kingdom, but in Flanders, Holland, the north of Europe, and the East and West Indies. In favourable years, the produce of Lafitte, Latour, and Château Margaux, sells at from three thousand to three thousand three hundred francs the tun, which contains two hundred and forty-two gallons; and when they have been kept in the *chais*, or vault, for six years, the price is doubled; so that, even in Bordeaux, a bottle of the best wine cannot be purchased at less than six francs. "During twenty years that I have been living at Bordeaux," says one of ROZIÈRE's correspondents, "I have not tasted three times any wine of the first quality; yet I am in the way of knowing it, and getting it when it is to be had. The wines of the year 1784 were so superior to those of other years, that I have never met with any thing like them[t]."

Of the RED wines of the Bordelais, the Lafitte, Latour, Château Margaux, and Haut-Brion, are so greatly esteemed, that they always sell from twenty to twenty-five per cent higher than any others of the province. The first-mentioned is the most choice and delicate, and is characterized by its silky softness on the palate, and its charming perfume, which partakes of the nature of the violet and the raspberry. The Latour has a fuller body, and, at the same time, a considerable aroma, but wants the softness of the Lafitte. The Château Margaux, on the other hand, is lighter, and possesses all the delicate qualities of the Lafitte, except that it has not quite so high a flavour. The Haut-Brion, again, has more spirit and body than any of the preceding, but is rough, when new, and requires to be kept six or seven years in the wood; while the others become fit for bottling in much less time.

Among the second-rate wines, that of Rozan, in the parish of St. Margaux, approaches in some respects to the growths of the Château Margaux, while that of Gorce, in the same territory, is

[t] Traité sur la Culture de la Vigne, Tom. I. p. 80.

little inferior to the Latour; and the vineyards of Leoville, Larose, Bran-mouton, and Pichon-Longueville, in the canton of Pauillac, afford light wines of good flavour, which, in favourable years, have much of the excellence of the finer growths. In the Entre-deux-Mers, the wines of Canon and St. Emilion, in the vicinity of Libourne, are deemed the best, being of a full body, and very durable. When new, these wines are always somewhat harsh and astringent; but they acquire an agreeable softness, and are characterized by a peculiar flavour, which has been not unaptly compared to the smell of burning sealing-wax. The aroma of the first growths is seldom fully developed, till after they have been kept eight or nine years; but the secondary qualities come to perfection a year or two sooner. The colour often grows darker as the wine advances in age, in consequence of the deposition of a portion of its tartar; but, when well made, and thoroughly fined, it seldom deposits any crust.

The WHITE wines of the province are of two kinds; those called *Graves*, which have a dry flinty taste, and an aroma somewhat resembling cloves; and those made in the white-wine district above described, as at Sauterne, Barsac, Preignac, and Beaumes, which have all a sweetish taste, at least when new, in consequence of the great ripeness of the grapes from which they are manufactured. The choicest Grave wines are obtained from the vineyards of St. Bris and Carbonnieux, at Villenave-en-Rions, about six leagues from Bordeaux, and one league from the left bank of the Garonne. The growths of Pontac and Dulamon, in the parish of Blanquefort, which is about two leagues on the other side of the town, are very durable, and resemble the Graves in every thing but the flinty taste. At Sauterne, the Clos-Yquem has the reputation of furnishing the best wine. The soil there is gravelly. At Barsac, the Clos-Coustet, belonging to Mad. DE SALUCE, gives the first of what are called the High Barsac wines; although there is very little difference in the elevation of any part of the territory.

These wines, also, keep very well, acquiring an amber colour, and a very dry taste, as they get old. Some Sauterne that dates from the middle of the last century is said to be still in existence.

Langon and Cerons, on the left bank of the Garonne; Mont-Basillac, St. Nessans, and Sancé, in the department of the Dordogne; and Clairac and Buzet, in that of the Lot and Garonne, give the best white wines of secondary quality. Those of Mont-Basillac, St. Nessans, and Sancé, are commonly known by the name of Bergerac, and approach in their nature to the class of sweet wines.

CHAPTER III.

OF THE WINES OF SPAIN.

EMULATING France in some of her richest growths, and in the abundant produce of her vineyards, Spain has long occupied a prominent place among the wine-countries of Europe. The range of mountains that overlook the extensive coasts, and bound the principal rivers, of the peninsula, present the happiest exposures, and every variety of soil best calculated for the cultivation of the vine; and the warmth of the climate ensures to its fruit an early and perfect maturity. Hence, in all those districts where a good system of management prevails, the vintages are distinguished by their high flavour and aroma, as well as by their uncommon strength and durability: in others, these natural advantages are lost by adherence to erroneous modes of treatment. The red wines, in particular, are often spoiled in the fermentation, and, generally speaking, are dull and heavy on the palate. In that class, the Spaniards can boast of none which will bear comparison with the more delicate growths of France; but in the preparation of dry white wines, and certain species of sweet wines, they stand nearly unrivalled: and the trade in them, which they carry on with all parts of the world, is a constant stimulus to industry, and a never-failing source of wealth to the more populous provinces of the kingdom.

In estimating the general character of the wines of any country, considerable allowance must be made for the prevailing tastes and habits of the natives, as well as the disadvantages in respect of

internal commerce under which they may labour. The Spaniard, when he drinks wine as an article of luxury, gives the preference to such as is rich and sweet. Hence he is disposed to rate the growths of Malaga, Alicant, and Fuencaral, more highly than those of Xeres, which, however, are the most perfect, and most generally esteemed by other nations. The great abundance, too, in which wine is everywhere produced, makes him careless of obtaining a particular supply; or, if he were inclined to take any pains about it, the difficulties of conveyance, and want of proper conveniences for keeping it, would, in general, prevent him from indulging his wish. Hence, when not supplied from his own vineyards, he commonly remains dependent on the next tavern for what may be required for family use, and must be content with such new and indifferent wine as the vintner may choose to send him. It is also worthy of remark, that, throughout the greater part of Spain, the peasantry store the produce of their vintages in skins, which are smeared with pitch; from which the wine is apt to contract a peculiar disagreeable taste, called the *olor de bota*, and to become muddy and nauseous. Bottles and casks are rarely met with; and, except in the monasteries and great commercial towns, subterraneous wine-cellars are nearly unknown. Under such management, we cannot be surprised that the common Spanish wines should fall so far short of the excellence that might be anticipated from the favourable circumstances in which they are grown; or that the traveller, in the midst of the most luxuriant vineyards, should often find the manufactured produce wholly unfit for use. "The mountains round Granada," observes Mr. Jacob, "are well calculated for vines, but so little attention is paid to the cultivation of them, that the wine produced is very bad: at the posada where we reside, there is only one kind of inferior sweet white wine, which is not drinkable; but we had the best proof that good wine is made here in some which a gentleman sent us from his cellar: it was equal to any Burgundy I have ever tasted, and of the same colour,

without any flavour of the skin; in fact, he had sent bottles to a vineyard about three leagues distant, celebrated for its excellent wine, in order to have it free from that taste which all the wines here acquire from being brought from the vineyards in sheep-skins with tarred seams. It is rather a curious fact, that, in a country where cork-trees abound, the trifling operation of cutting them is so ill done, that, to have his wine in good order, this gentleman thought it necessary to send to Malaga for English corks, as well as English bottles[a]."

In certain of the growths of Languedoc and Roussillon, we have seen some approach to the qualities of the better kinds of Spanish wines. They resemble them in strength and spirituosity, in fulness of body, and extreme durability. The peculiar flavours observable in those of Spain are, doubtless, in part to be referred to the processes which are employed in the manufacture of them. Thus, in preparing the sweet wines, the must is often boiled; while, for the production of the dry white wines, the grapes are sprinkled with gypsum previously to their being trodden or subjected to the press. By these operations the saccharine matter becomes concentrated, and the proportion of alcohol is increased; but the aroma is partially deadened or destroyed, and the liquors obtained therefore want the delicate perfume that distinguishes the finest French wines.

In the province of Andalusia the best wines are grown, particularly at Xerez de la Frontera, near Cadiz, and the adjoining territories. Many of the principal vineyards are in the hands of British and French settlers; and to this circumstance it may not, perhaps, be unfair to ascribe the improvement which has, of late years, taken place in Sherry wines: for, in former times, they appear to have been managed with less care; and, if we may credit the account given by certain travellers, some disgusting

[a] Travels in the South of Spain in the Year 1809, p. 303.

practices, which could not enhance their quality, were adopted in the manufacture of them[b]. The soils of the district have been divided by Don Simon de Roxas Clemente into four orders: viz. 1st, *Albariza*, which chiefly consists of carbonate of lime, with a small admixture of silex and clay, and occasionally magnesia; 2d, *Barros*, which is composed of quartzose sand, mixed with clay, and red or yellow ochre, and forms horizontal beds, extending along the coast from the mouth of the Guadalquivir as far as Conil; 3d, *Arenas*, or pure quartzose sand; and, 4th, *Bugeo*, which contains argillaceous loam, mixed with carbonate of lime, some quartzose sand, and a large portion of vegetable mould. Of these, the first-named is the best and most productive; and the greater part of the vines at San Lucar, Xeres, and Trabugena, are planted on hills of *albariza*. They yield twice the quantity of wine that is afforded by plants growing on the *barros*. Several of the vineyards of Xeres and San Lucar, however, are situated on soils of *barros* and *arenas*. The *arenas* are said to yield a more luscious grape, and the same proportion of must as the *barros;* and the quality is to that of the *barros*, as that of the *barros* is to the *albariza*. The *bugeo* is found occupying the ravines and valleys of the chalk hills; and, being subject to enormous fissures during the heats of summer, is the least favourable to the vine: nevertheless, there are some plantations on the *bugeo* at Xeres and San Lucar[c]. The vines of the latter territory are generally placed at from four and a half to six feet asunder.

For making the Sherry wines, red and white grapes are used indiscriminately. They are gathered as they become ripe, and are spread on mats to dry. At the expiration of two or three days, they are freed from the stalks, and picked; those that are unripe or rotten being rejected. They are then introduced into

[b] See Voyages en Espagne et en Italie, par le P. Labat, Tom. I. p. 340.

[c] Ensayo sobre las Variedades de la Vid Comun. p. 4—8.

vats, with a layer of burnt gypsum on the surface, and are trodden by peasants with wooden shoes. The juice that flows from them is collected in casks; and these, as they are filled, are lodged in the stores, where the fermentation is allowed to take its course,—continuing generally from the month of October till the beginning or middle of December. When it has ceased, the wines are racked from the lees, and those intended for exportation receive whatever addition of brandy they may be thought to require, which seldom exceeds three or four gallons to the butt. The wine thus prepared has, when new, a harsh and fiery taste, but is mellowed by being allowed to remain four or five years, or longer, in the wood; though it only attains its full flavour and perfection after having been kept fifteen or twenty years. Sometimes bitter almonds are infused in it, to give that nutty flavour which is so highly prized in this wine. The driest species of Sherry is the *Amontillado*, made in imitation of the wine of Montilla, near Cordova. As the quantity manufactured is very limited, it sells much higher than the other kinds. In the year 1789, the vineyard lands around Xeres were estimated at eight thousand two hundred and forty-five *arranzadas*, or seven thousand eight hundred and eighty-four English acres, and their produce at twelve thousand butts, of which between six and seven thousand butts were exported[d]. When Mr. Jacob travelled, the quantity of wine annually made is stated to have been about forty thousand pipes [butts?]. Of this, twenty-five thousand were supposed to be consumed at Xeres, Cadiz, and in the vicinity; and fifteen thousand exported, of which about seven thousand were destined for the English market[e]. Such a prodigious increase, however, is scarcely credible; and I suspect the statement must be exaggerated, especially with respect to the consumption by the natives, who derive their

[d] Ponz, Viage de España, Tom. XVII. p. 262.

[e] Travels in the South of Spain, p. 40.

chief supply of common wines from Lucena, Port St. Mary, and St. Lucar.

Paxarete, an ancient monastery, about five miles from Xeres, gives its name to a rich and highly esteemed malmsey wine, which is procured from the *Pedro Ximen*, and other rich grapes, growing on the chalky soils of the surrounding territory. But, as all the Xeres wines are made from partially dried grapes, it sometimes happens that the fermentation ceases before the saccharine matter is fully decomposed; and an agreeable sweet wine, possessing much of the aromatic flavour of Sherry, but taking the name of Paxarete, is the result. Some muscadine wines are also manufactured at St. Lucar; but the vintages there are not treated with the same care as those of Xeres.

The *Tintilla*, or *Tinto di Rota*, so called from the town of that name, is the only red wine of Andalusia worthy of notice. It is a generous sweet wine, with a strong spicy flavour; but its richness and heaviness disqualify it for common use, and it is therefore chiefly drunk as a cordial.

The mountains that surround Malaga exhibit strata of argillaceous slate, intersected by numerous veins of quartz, and reposing on limestone rock, which receive the appellation of *herriza* when compact, and of *lantejuela*, or *pizarro*, when easily separated into laminæ. The latter, being of a loose and friable texture, furnishes the best soil for vineyards: those that are established on the more compact rock are of much inferior value. The depth of mould covering the slate is commonly about a foot and a half; in a few places it amounts to six feet: in others, the rock is left entirely bare, especially where the declivities are considerable. To prevent the earth from being washed away by the rains, the more rapid slopes are formed into terraces.

In this hilly district, which is known by the name of *Axarquia*, the vine is extensively cultivated; and such is the excellence of the

climate, that it ripens its fruit at an elevation of several thousand feet above the level of the sea, giving, in general, not less than three separate harvests of grapes. "The first," says the author last quoted, "is in the month of June, for the purpose of making raisins. In the month of September the second crop is gathered, which is made into a dry wine resembling Sherry, but, to my taste, much inferior. The last vintage of the year is in October and November; and produces those wines called in Spain and her colonies Malaga, and in England, Mountain. Other species of wine made in the vicinity of Malaga are the Pedro-Ximenes; the Guinda, which is merely the common sweet wine of the mountains, with a mixture of the juice of cherries, and is not much valued here; and the Lagrima de Malaga, a sweet wine resembling Constantia, which, though highly valued by the Spaniards, is not agreeable to an English palate[f]."

The Pedro-Ximenes, mentioned in the above paragraph, receives its name from a grape which is said to have been imported from the banks of the Rhine by an individual called Pedro Simon (corrupted to Ximen, or Ximenes), and is one of the richest and most delicate of the Malaga wines, resembling very much the malmsey of Paxarete.

The vines in the Axarquia are planted generally at the distance of nine feet from one another. From every thousand stocks, forty *arrobas* (or one hundred sixty-seven and a half gallons) of wine are obtained, yielding on distillation one-sixth of brandy. The whole produce of the district amounts to nine hundred thousand arrobas, or twenty-five thousand six hundred and fourteen pipes. In 1798 the quantity exported was three hundred and eighty-five thousand two hundred and fourteen arrobas.

At Alicant, in the province of Valencia, a *vino tinto* is procured from the *tintilla* grape, which resembles the Rota wine, and contains

[f] Jacob's Travels, p. 245—6.

a large quantity of tannin, holding in solution the colouring matter, and precipitating animal gelatin. It is sweet and spirituous, having a reddish orange colour, and a bitter and somewhat rough after-taste. Like the Rota, it is chiefly used for medicinal purposes. Valencia also produces several other generous red wines; as those of La Torre, near Murviedro; Peralez and Segorbe, in the interior; and Vinaroz and Benicarlo, on the sea-coast. From the last-mentioned port a great quantity of wine is annually shipped for Cette, whence it is carried by the canal of Languedoc and the Garonne to Bordeaux, for the purpose of being mixed with the poorer wines of the Bordelais.

On the plain of Ampurdan, and other parts of Catalonia, the vine is extensively cultivated, occupying nearly four-fifths of all the arable land; but in consequence of the slovenly and injudicious system of management which is followed, the vintages are still liable to the same censure as in ancient times, on account of their thickness and muddiness[g]. For the preparation of the red wines the grapes are used without any selection; and, with a view to give colour and strength to the must, a large quantity of burnt gypsum is strewed upon them before they are trodden, which occasions a rapid fermentation, and imparts a harsh dry taste to the wine, though much of the saccharine matter remains undecomposed. When the wine is made, the manufacturer seldom takes the trouble of racking or fining it, but sends it into the market as it came from the vat. Notwithstanding these imperfections, however, a considerable exportation takes place from Mataro to those countries which are deficient in the stronger growths. The white wines are of a choicer quality, particularly the malmsey of Sitges, which approaches to that of Malaga, but does not keep so well, being very apt to fret, probably from the want of proper fining. The wine of the Priory, which is

[g] "A caupone tibi fex Laletana petatur,
Si plus quam decies, Sextiliane, bibis."
MARTIAL. Epig. I. 27.

reckoned the best of all the Catalonian growths, is produced on hills of loose argillaceous schist, like that of the Axarquia.

Many of the vineyards of Arragon are planted in the same kind of soil, and chiefly with red grapes, which give an excellent *vino tinto*. That which is obtained from the species called *garnacha* (the *grenache* of the Roussillon vineyards) is in highest repute; and the growths of Cariñena are preferred to all others.

In New Castille, the muscadine wine of Fuencaral, near Madrid, ranks among those of the first class: Peralta, in Navarre, also affords a delicate and much esteemed dessert wine, as well as a particular sort termed *rancio*, from the flavour which it contracts by long keeping, and which to some palates proves highly agreeable.

Although, in conformity to the taste of the natives, as was before remarked, a great proportion of the wines of Spain, both red and white, are of the sweet class, yet in certain districts some very good dry red wines are manufactured; among which those of Val de Penas, Manzanares, and Ciudad Real, in the territory of La Mancha, and kingdom of New Castille, take the lead. They are in much request at Madrid, and approach in quality to some of the stronger Bordeaux wines. The soils on which they grow are, for the most part, gravelly.

The island of Majorca furnishes several wines of sufficiently good quality to bear exportation; among which those made in the district of Benesalem, three leagues from Palma, are accounted the best, at least of the red growths. The vintage, however, is not treated in the most judicious manner; the grapes being fermented for fifteen or twenty days in deep stone cisterns, into which they are introduced at repeated intervals, so that the operation is frequently checked in its progress, and is seldom fully completed. When it is thought to have ceased, the liquor is drawn off into large tuns, containing five or six pipes each; and there the secondary fermentation, as might be expected, is often so violent as to burst the vessels, though made of olive staves four inches in thickness,

and bound with hoops proportionably strong. Gypsum is also used here for the manufacture of the red wines. At Banalbusa is grown the white wine known under the name of *Alba flor*, which, though it has rather less aroma, approaches in flavour to the growths of Sauterne. Minorca also produces some wines of a similar kind.

CHAPTER IV.

OF THE WINES OF PORTUGAL.

SINCE the commencement of the last century, the political relations of England and Portugal have rendered us extremely familiar with the wines of the latter country, and obtained for them a degree of favour and importance, which, under other circumstances, they could hardly have acquired; for their intrinsic merits would entitle them, at most, to be placed on a level with the better sorts of Spanish wines and the secondary growths of France. In many of the provinces the vine is planted indiscriminately on hill and plain, on indifferent soils, and allowed to shoot up to a great height; a great mixture of species, also, is observable in the vineyards: but in the vicinity of Lisbon, and along the course of the Douro, the culture of the plant is better understood; and it is accordingly from these territories that the supply which comes to this country, under the denomination of Lisbon and Oporto wines, is derived.

The wine country or district of the Cima do Douro, or Upper Douro, commences about fifty miles from the harbour of Oporto, and presents a succession of hills on both sides of the river, which afford the choicest exposures, and such loose and crumbling soils, as have been shown to be most propitious to the culture of the vine: but the best wines are procured from those that overlie beds of schist (*lousa*), and consist chiefly of the decomposed rock, as in the territory of the Axarquia, mixed in some places with mica. The whole of this district is placed under the superintendence of a chartered company, called the General Company for the Cultiva-

tion of the Vineyards of the Alto Douro, which had formerly the power of fixing not only the prices of the different qualities of the wines, but even the limits within which they were to be produced. Accordingly the vintages have been usually divided into two principal classes; namely, Factory wines (*vinhos da Feitoria*), and secondary wines (*vinhos de ramo*), the purchase and sale of which was for a long time confined to the company. The Factory wines are again subdivided into *vinhos de embarque*, or export-wines, destined for the English market; and *vinhos separados*, or assorted wines, for exportation to the Portuguese colonies and other foreign countries, or for home consumption. The *vinhos de ramo* are used partly for distillation, and partly for the supply of the taverns in Oporto, &c. The company has also the monopoly of all the brandy used in Oporto and the surrounding country; and, until very lately, had the sole right of supplying the taverns.

In the territory of the Cima do Douro, the vines are in general kept low, and trained on poles. A considerable variety of species is cultivated: among which those called *alvarelhaõ*, *pe agudo preto*, *tinta-caõ*, and *sousaõ*, furnish a wine of a strong and full body and good flavour; while the produce of the *bastardo* and *donzelinho* is of a milder and sweeter quality. As soon as the grapes begin to shrivel, they are gathered and introduced into broad and shallow vats, where they are trodden along with the stalks; and this operation is repeated several times during the fermentation, which, in the case of the superior wines, continues about seventy-two hours. When the liquor has ceased to ferment, it is removed into large tuns, containing from eight to twenty pipes each. After the fair of the Douro, which commonly takes place in the beginning of February, the wine is racked into pipes, for the purpose of being conveyed down the river into the cellars of the Factory, or of the wine merchants of Oporto, who make their purchases at this period. To that which is reserved for exportation a quantity of brandy is added, when it is deposited in the *armazens*, or stores;

and a second portion is thrown in before it is shipped, which is generally about twelve months after the vintage. When it arrives in this country, it is of a dark purple or inky colour, a full rough body, with an astringent bitter-sweet taste, and a strong flavour and odour of brandy. After it has remained some years longer in the wood, the sweetness, roughness, and astringency of the flavour abate; but it is only after it has been kept ten or fifteen years in bottle, that the odour of the brandy is completely subdued, and the genuine aroma of the wine is developed. During the process of melioration, a considerable portion of the extractive and colouring matter is precipitated on the sides of the vessels in the form of crust; and when this takes place in a great degree, the wine becomes tawny, and is found to have lost its flavour and aroma. In some wines this change occurs much earlier than in others, especially in those which have been manufactured from white grapes, and coloured with elderberries, or other heterogeneous materials, as is frequently the practice of the wine-makers when there is a deficiency of black grapes; and it is always hastened by a large admixture of brandy.

Whether this last-mentioned ingredient in the composition of Oporto wines was originally introduced with the view of enabling them to bear sea carriage, or merely in order to please the English palate, it is of little importance to determine. In this country, however, it has become an article of belief, not only that the quality of these wines is much improved by the admixture, but that they will not even keep any length of time without a certain portion of brandy; and as their flavour must unquestionably be more or less affected by such an addition, it may be worth while to inquire how far this opinion is well-founded, and whether either of the alleged advantages be attained.

In the former chapters of this work I have had repeated occasion to remark, that if the fermentation of the must has been properly conducted, — if the saccharine principle has been fully decomposed,

and the superabundant leaven carefully separated by sulphuring and other means, — or, if a greater proportion of sugar exists in the must than the ferment can possibly decompose,—the wine produced may be kept in close vessels without any risk of alteration during a long term of years. But in the less perfect wines, the surplus extractive matter absorbing the oxygen of the small portion of sugar that remains undecomposed, or of the atmospherical air included in the cask or bottle, causes the ropiness or muddiness observable in those liquors when they begin to turn; and is afterwards precipitated along with the colouring matter, hastening their passage to acescency, or reducing them to a nearly vapid state. That these changes may be, in some measure, prevented by the introduction of brandy, the experiments of CADET, and the long prevalence of the practice, would seem to demonstrate. In endeavouring, however, to check one species of degeneration by such means, we only hasten another: for it is very certain, that, when the addition is made after the full fermentation of the must, no perfect incorporation of the two fluids will take place; but the flavour and perfume of the wine will become completely obscured; and the adventitious alcohol, combining with the aqueous part of the liquor, will occasion a gradual separation of the extractive and colouring matter, leaving merely a mixture of brandy and water with a slight vinous tinge. That this is the case, must, I think, be evident to every one who has observed the progress of the decomposition incident to the inferior Port wines, which can never be said to be in condition, but which, after a certain period, lose what little flavour they possessed, and become more or less tawny; while lighter wines, that contain no adventitious spirit, remain quite unchanged.

Previously to the year 1715, the Portuguese are supposed to have been ignorant of the art of preparing wines for exportation[a]. That,

[a] Original Documents respecting the injurious Effects and Impolicy of a further Continuance of the Portuguese Royal Company of Oporto. London, 1813. P. 82.

when first introduced into this country, the Oporto wines were free from any admixture of brandy, will be shown in a subsequent chapter: but, that about this period, if not before, the practice of mingling brandy with the must during fermentation had come into vogue, may be inferred from a passage in a small work on the vineyards of Portugal, published in 1720, in which it is alleged, that the wine is improved in quality by having half a *canada*, or about three gallons to every pipe, thus added[b]. The usage in question seems to have been very prevalent in the year 1754, when the English factors of Oporto addressed a letter to their agents in the Alto Douro, complaining, that "the grower, at the time of vintage, is in the habit of checking the fermentation of the wines too soon, by putting brandy into them whilst fermenting; a practice," these gentlemen observe, "which must be considered as *diabolical*, for after this the wines will not remain quiet, but are continually tending to ferment, and to become ropy or acid[c]."

This statement of the consequences of such a mode of proceeding, though it may seem somewhat contradictory, I am not disposed to call in question: for it is certain, that, although the fermentation may have been suspended, in the first instance, by the addition of brandy, yet the free leaven and undecomposed sugar of the imperfect wine will always have a tendency to excite a renewal of the process, or to produce what is technically called a *fretting* of the liquor; and this, if the quantity of spirit be not considerable, may be rather promoted than checked by it. It is probable, however, that the brandy, which is introduced at this stage, will have a better chance of amalgamating with the alcohol of the must, than when the mixture is deferred till a later period; for, even when

[b] "Na fervura do vinho he conveniente deitar ao menas meya canada de agua ardente a razaõ de pipa, porque lhe acrescenta os espiritos, faz os vinhos mais valerosos." *Agricultura das Vinhas*, p. 146.

[c] Original Documents, p. 36.

there is a considerable degree of secondary fermentation (and some generally takes place on the addition of any heterogeneous liquor), it enters with difficulty into union with the vinous fluid, — its odour and flavour continue long predominant, — and it may be almost always separated by reagents which will not disengage the true alcohol of the wine, as has been satisfactorily shown by the researches of FABBRONI and others.

In a pamphlet relating to the Port wine trade, which appeared a few years since, and which may be considered as official, some very absurd notions are promulgated on this head. It is, for example, pretended, " that all wines, at a certain period after fermentation, require brandy to *quiet*, *cleanse*, and *preserve* them; that the flavour of all wines is in the essential oil, which is *greatest in the lees;* and that, the flavour of brandy being more concentrated than the flavour of the wine, the use of such brandy, when both are incorporated by mature age, not only strengthens the wine and makes it keep, but *calls forth, and nearly doubles*, its flavour[d]." But those who write so ignorantly ought to have been aware, that such doctrines are not only irreconcilable with the laws of fermentation, but are at utter variance with the most approved rules for the management of the Alto Douro wines; for the grower, or wine-merchant, is particularly cautioned " never to use brandy in such quantity as to cover the flavour of the wine[e]." The interests, however, of the authors of the pamphlet had led them to take a different view of the matter, as may be inferred from the following passage of the Answer of the Agents to the Letter of the Factors above quoted. " The English merchants knew," they observe, " that the first-rate wine of the Factory had become excellent; but they

[d] Defence of the Royal Wine Company at Oporto, by its Correspondents in London. 1812. Appendix, p. 58.

[e] Memoria sobre o estade da Agricultura e Commercio do Alto Douro; Memorias Economicas da Acad. Real. das Scienzas de Lisboa, Tom. III. p. 104.

wished it to exceed the limits which nature had assigned to it, and that, when drunk, it should feel like liquid fire in the stomach; that it should burn like inflamed gunpowder; that it should have the tint of ink; that it should be like the sugar of Brazil in sweetness, and like the spices of India in aromatic flavour. They began by recommending, by way of secret, that it was proper to dash it with brandy in the fermentation, to give it strength; and with elderberries, or the rind of the ripe grape, to give it colour; and, as the persons who used the prescription found the wine increase in price, and the English merchants still complaining of a want of strength, colour, and maturity in the article supplied, the recipe was propagated till the wines became a mere confusion of mixtures[f]."

Though the picture thus drawn may be somewhat overcharged, I fear it must be regarded as conveying too just a representation of the English taste in Port wines. To so great a length is the practice in question occasionally carried, that I have met with samples of these wines of excellent quality in other respects, but so highly adulterated with brandy, and retaining their adventitious strength in so marked a degree, as to baffle the courage of the most determined Port wine drinkers, even when their harsher properties had been much subdued by age. With regard to white wines, it may be observed, that, as their flavour and aroma are generally of a more delicate and evanescent nature than those of the red class, they are still less capable of bearing such an admixture. The lighter sorts, such as Bucellas, are irretrievably ruined by it; and as to the stronger kinds, it is only after they have undergone a secondary fermentation by a voyage to a warm climate, during which a great portion of their spirit must necessarily evaporate, and after they have been allowed to mellow for many years, both in the wood and in bottle, that they regain any thing like their original flavour. The prime cost of these wines is in this manner

[f] Original Documents, p. 40.

doubled or tripled; and this great additional expense is incurred by those who can afford such luxury, merely in order that they may be reduced, in the course of twenty years, to the state to which they would probably have been brought, in half that time, by a more skilful application of the established principles of fermentation.

Towards the middle of the last century, it appears, that the adulterations which were practised in the manufacture of Port wines had become so glaring and universal, as to cause a very great diminution in the demand for those wines, and consequently in the prices and the quantity exported: and the distress resulting from this stagnation of trade was still further increased by several failures that happened, about the same time, among the farmers and wine-merchants. Certain individuals of Oporto, in conjunction with the proprietors of the vineyards, availing themselves of the discontent and clamour which had been excited by these occurrences, succeeded in persuading the Portuguese government to sanction the formation of a joint-stock company for the protection of the commerce of the wines of the district. The professed objects of these gentlemen, as stated in their petition to the king, were, "to encourage the culture of the vineyards; to secure the reputation of the wines, and the support of both the one and the other by fixed prices; to promote, in consequence, inland and foreign commerce; and, finally, to insure the preservation of the health of his majesty's subjects[z]." By the *alvara*, or royal patent, which was issued to them on the 10th of September, 1756, they were accordingly authorized to form a company, with a capital of one million eight hundred thousand crowns, in shares of four hundred each; and the powers conferred upon them were, as has been already stated, very ample. Among other articles, it was enacted,—

"1. That the district calculated for the growth of the export-

[z] Review of the Discussions relating to the Oporto Wine Company. Lond. 1814. P. 7.

wines should be marked out, and the mixture of these wines with others from without the boundary prohibited.

" 2. That no one should be permitted to cover the vines with litter; as this operation, though it considerably augmented the produce, tended to deteriorate the quality of the wine.

" 3. That, in the manufacture of the wine, no one should use elder-berries, which not only gave it a false and evanescent colour, but also changed its natural flavour (the planting of the elder being at the same time forbidden within the line of demarcation, and orders given to extirpate the plants that already existed).

" 4. That, after each vintage, a list should be made out of the number of pipes in every cellar within the district; and that the wine-tasters of the company, and others to be nominated by the farmers, should prove them, and arrange them in classes, distinguishing such as were fit for exportation, and delivering to the proprietors a corresponding ticket.

" 5. That the market should be opened on a certain day, and should be free to all English merchants, to such Portuguese as were qualified as legitimate exporters, and to the company itself."

As far as these regulations were calculated to suppress the pernicious practices that had been resorted to in the culture of the vineyards and management of the wines, they are certainly entitled to commendation; although it may be doubted whether such coercive measures, where necessary, might not have been, with more safety and propriety, intrusted to the municipalities of the district, as is the case in France and other wine-countries. But here our applause must cease, and give place to an unqualified sentence of condemnation; for it is not by legislative enactments that the agriculture and manufactures of any country can be improved, or its commerce effectually promoted: and if we examine more narrowly the constitution of the company of the Douro, and observe the manner in which it has exercised the authority delegated to it, we shall find it grossly betraying its trust, and exhibiting all

the odious features of a monopoly. The advocates of the institution, indeed, contend, that it is to be regarded solely as a *fiscal* corporation, established for the encouragement of agriculture, and correction of the abuses which had crept into the wine trade. But, instead of inspiring confidence, the establishment of the company appears to have added to the public alarm; for during the first four years of its reign, the prices of Oporto wines, which, as we have already seen, had been gradually declining, fell to a much lower rate, than they had been at since the year 1721. This fall, it is true, might be partly owing to the previous depreciation of these wines, to the increase in the number of vineyards, and the overstocked state of the markets. After the year 1760, the prices, and, it is to be presumed, the qualities also, gradually improved; but, considering the difference in the value of money, they can hardly be said to have ever regained the rate of 1721[h]. Nor could it well be otherwise: for the members of the company, not contented with the many exclusive privileges which the original charter had secured to them, solicited and succeeded in procuring several others, which were not only opposed to the soundest maxims of commercial policy, but which were also in direct violation of the treaty of 1654, on which the British merchants at Oporto rested their claim to freedom of trade; and, by a succession of officious interferences and arbitrary regulations, they have done great injury to the farmers, and checked the improvement of the wines of the Douro. In fact, so flagrant have been the abuses of their authority, that they have repeatedly called forth the censures of the ablest writers of the country. In the paper above quoted, which was published under the immediate sanction of the Portuguese government, about thirty years ago, the evils resulting from the monopoly

[h] In the last-mentioned year the Factory wines sold at 48,000 to 84,000 réis (£16. 2*s*. to £28. 4*s*.) the pipe. In 1758 and 1760, the prices were from 16,000 to 22,000 réis (£5. 7*s*. to £7. 7*s*.) The best wines of 1820, when the vintage was very abundant, but of superior quality, sold for 36,000 réis.

with which they have been invested, are exposed with a freedom, and justness, and force of observation, which would do credit to the most enlightened political philosophers of the present age[i].

Into the history of this monopoly it is not my intention to enter minutely, as the principles on which it was founded are now universally abandoned: but as the Oporto company still exists, though with diminished powers of inflicting injury on agriculture and commerce; and as in some late discussions it was not without defenders even in England, I may be permitted to take a brief review of its proceedings, and to point out some of the consequences that have necessarily resulted from its measures.

In the first place, it must be evident to every one possessed of common understanding, that no greater absurdity could have been imagined, than to mark out a district of several leagues in extent, exhibiting a great variety of soils and exposures, as the only territory capable of producing wines for exportation; especially when it was known, that many of the growths within the line of demarcation were of inferior quality, while others without that boundary were of first-rate excellence. One obvious effect of this senseless enactment has been to encourage smuggling on the borders; for those farmers whose lands produce only light wines, must naturally be tempted to improve them, and render them fit for purchase, by an admixture with the stronger *ramo* wines, which they can always procure at a low price, and import without much risk of detection. That this contraband trade has constantly prevailed to a great degree, is very certain. So vexatious, in fact, has it proved to the company, that, finding all the measures which had been devised for its suppression of no avail, the directors applied for, and, in the year 1766, obtained an *alvara*, authorizing them to make a survey of the district assigned for the production of the inferior wine, in order that they might be enabled to compel the proprietors to render an exact account of the

[i] See 'Memorias Economicas,' ut supra.

disposal of it, according to the average produce of the different vineyards for the five preceding years. Still the abuse continued, and in 1771 rose to such a height, that the terrible expedient, as it has been justly termed, of a commission of inquiry, supported by military force, was resorted to, and persevered in upwards of three years; occasioning much ruin and desolation throughout the country, during the time that it lasted. And, after all, the frauds complained of were not stopped; for that was plainly impossible[k]. Yet the company has ventured to affirm, that the welfare of the farmers depended on the strict observance of its laws and regulations[l]!

But, if we examine the proceedings of this body rather more closely, we shall find, that it has been the first to violate this its own fundamental law; for "in the days of the MARQUIS of POMBAL, who was the chief promoter and supporter of the establishment," we are told, "that the company did not scruple to purchase the wines of Oeiras (where the Marquis had an estate), as if they had been Port. Nor did the surplus of the wine above the demand prevent it, in the time of the minister SCABRA, from purchasing the bad and tart wines of the vineyards of the plains of Coimbra; and it made all these purchases, as if they had been wines of the Douro, or Port[m]." It will be recollected, too, that the company had the right of purchasing the *ramo* wines, whether grown within or without the line of demarcation,—a privilege necessarily liable to great abuse, and unquestionably much abused, if reliance is to be placed on the following statement. In exporting wines, every one knows that great care is taken to have the casks quite full: but for a long time the company's wines were not exported until after they had remained three years in the cellars of Oporto, during which time they experienced a diminution of one-ninth part. Now, as it was found, from an examination of the custom-house books,

[k] Memorias Economicas, Tom. III. p. 89, 90.

[l] Memorial presented to the Cortes on the 26th of October, 1820.

[m] Original Documents, p. 60.

that the same number of full pipes of export-wines were shipped from the company's cellars as had been entered in them, it clearly follows, that the deficiency in the bulk, from evaporation and leakage, must have been supplied with *ramo* wines; and, as the exports of the company have often amounted to several thousand pipes in the year, it is equally certain, that the quantity of such wines which would be required for this purpose must have been very considerable[n].

By far the most injurious privilege, however, with which the company was invested, and that which has most materially interfered with the trade of Oporto and the manufacture of Port wines, is the power which it possessed of fixing a *maximum* of price for the wines of the district. This clause in the charter betrays too clearly the character of the institution; and proves, as the writer last quoted justly remarks, that, notwithstanding all the specious pretexts with which it was attempted to veil the design, the substantial and primary object of the company was the advancement of its own trade. In fact, the direct and inevitable tendency of such a power must be, to prevent the agriculturist from exercising freely his industry, and to render his labours subservient to the interests and policy of the association. It was not its wish to procure the finest wines which the different vineyards could furnish, but, on the contrary, to obtain the greatest quantity of that standard which was best suited for exportation. If on favourable soils, and in propitious seasons, any superior wines were produced, it did not accord with the views of the company, that these wines should be sent to its customers in their original purity; as it was more advantageous to conceal the existence of them, and to use them for mixing with the inferior sorts. The cultivator, therefore, of such fortunate growths, not being remunerated for his greater outlay, or for the superior skill and industry which he might have displayed in the management of his vineyard, could have no induce-

[n] Memorias Economicas, Tom. III. p. 145.

ment to continue his exertions, but would thenceforth content himself with raising, at the least possible expense, the greatest possible quantity, of a middling quality, or such as he could most readily dispose of, under the name of export-wines. In this way, the finer products of the Douro vintages have remained, in a great measure, unknown to us; and Port wine has come to be considered as a single liquor, if I may use the expression, of nearly uniform flavour and strength, — varying, it is true, to a certain extent, in quality, but still always approaching to a definite standard, and admitting of few degrees of excellence. The manipulations, the admixtures, and, in one word, the adulterations, to which the best wines of the Cima do Douro are subjected, have much the same effect, as if all the growths of Burgundy were to be mingled in one immense vat, and sent into the world as the only true Burgundian wine: the delicious produce of Romanée, Chambertin, and the Clos-Vougeot, would disappear; and in their places we should find nothing better than a second-rate Beaune or Macon wine.

That this view of the prejudicial influence of the company on the manufacture of the wines of the Douro is not founded on mere theory, but is confirmed by facts, will, I think, very fully appear from what has occurred with regard to the white wines of the district. Formerly those wines enjoyed a high reputation, and were perhaps not inferior to the rich growths of Oeiras, Carcavellos, and Lavradio; but since the establishment of the company they have almost disappeared, or are only met with occasionally, and of indifferent quality. The cause of their disappearance or degeneration is this: the farmers found their interest in extirpating the vines which produced them in greatest perfection, such as the *muscatel*, *gouveio*, *malvasia*, &c., and in substituting others, such as the *verdeal*, *rabo de ovelha*, &c., which yield a larger quantity of wine, but of a coarser nature[°]. On this fact I am disposed to place the greater stress, as the defenders of the company have kept it out of view, and

[°] Memorias Economicas, Tom. III. p. 137.

because it rests on an authority which they will hardly venture to call in question. It moreover tends to show, that their disparagement of the white wines of Lisbon was wholly unwarranted[p]: for these wines have always maintained a considerable repute, and continue to be supplied of very excellent quality.

When the late revolution in the government of Portugal took place, hopes were entertained, that the privileges which had been so rashly conferred, and so greatly abused, would be entirely done away; or, at least, that such a change might be effected in the constitution of the company, as would deprive it of its objectionable character. Soon after the installation of the Cortes, the policy of the original patent and subsequent enactments was brought under review, in various memorials presented to that body by the corporations of certain towns, and by some of the landed proprietors in the Alto Douro. These papers were printed by order of the Cortes; and a spirited analysis of their contents, drawn up by one of the deputies, in which the mischiefs of all restrictions on commerce and agriculture were forcibly exposed, seemed to warrant the expectation, that the evils complained of were about to be effectually redressed. In the mean time, the company was not inactive. The merchants of Oporto had proposed a plan of reform, which tended to abrogate all its privileges, and to reduce it to a simple mercantile association. The farmers of the Douro, on the other hand, little understanding their own interests, were easily persuaded to give in a counter-petition, praying not only for the continuance of the company, but even for the concession of greater powers than it already possessed; while the directors submitted a project of their own, in which, although they abandoned several of their former claims, such as the right of pre-emption with respect to the wines of the Douro, &c., they took care to reserve one of the most lucrative branches of the company's trade,—namely, the monopoly

[p] See Appendix to Defence, &c. p. 46.

of all the brandy used in Oporto and the vicinity. In the beginning of last year, these different proposals were referred to a committee, which reported in favour of the company's plan, with some slight alterations: and, accordingly, the said plan of reform was embodied in the shape of a decree, which passed the Cortes on the 11th of May, and received the royal sanction on the 17th of the same month. Of the articles which it comprises, the following are among the most important:—

"1. The General Company for the Superintendence and Encouragement of the Vineyards of the Alto Douro shall continue in existence, in as far as the production of wines in that district shall exceed the quantity exported and used for home consumption."

"5. The existing divisions of *Feitoria* and *Ramo* shall cease: but the exterior line of demarcation shall be retained, comprehending all those lands which are now planted, or may afterwards be planted, with low vines, within the said boundary.

"6. The directors of the company shall continue, as heretofore, to take an account of the quantity and qualities of wine produced, and regulate the tonnage upon it."

"9. The government, on receiving the report of the directors, shall determine, according to circumstances, both the day for the opening of the fair of the Douro, and the time of its duration; provided always, that the opening be not deferred beyond the second day of February.

"10. The preferences which the law had accorded to the company, and the legitimate export-merchants (*negociantes legitimos exportadores*), are declared to be abolished.

"11. Every citizen shall be at liberty to purchase wines in the Alto Douro, and to sell them in the town of Oporto, or wherever else he may find expedient, as well as to distil any wines, whether of his own manufacture, or bought by him.

"12. The company shall be obliged to purchase at the price fixed by the law of the 21st September, 1802, all the wine remaining

unsold after the fair of Regoa, that shall be offered to it by the farmers, until the end of March.

" 13. The wine mentioned in the preceding article, in case it be not exported, may be applied to the same purposes as the inferior wines, or used for distillation."

" 18. Only the directors of the company shall have the right to sell and import brandy for preparing and mixing with wines, within the barriers of Oporto, Villa Nova de Gaya, and the line of demarcation of the Alto Douro."

" 30. The present decree shall continue in force for the space of five years, or until the whole or any of the articles contained in it shall be revised or altered in such manner as may be judged fit."

Whether these enactments will produce any great improvement in the manufacture and quality of the wines of the Douro, appears very doubtful. Though many of the more obnoxious privileges of the company are now abolished, yet others remain which must always have a prejudicial tendency. Its fiscal powers, the monopoly of brandy, and the right which it possesses, in conjunction with the government, to fix the prices at which the superabundant wine, and all the brandy of the district, shall be purchased, must hamper commerce, and place the cultivator, in a great measure, at its mercy. But, that a body possessing such extensive influence should relinquish its authority, without a struggle more or less successful in the issue, was, perhaps, too much to expect. When errors in legislation have been confirmed by long usage, the return to true principles becomes proportionably difficult: so many persons are interested in upholding the present state of things,—so many plausible arguments are adduced to prove the danger of innovation,—that even those individuals who are most firmly convinced of the necessity of a thorough reform, and of the insufficiency of partial remedies, often partake of the alarm, and, in opposition to their better judgment, are led to acquiesce in the more timid and fallacious counsels of the adverse party.

On the whole, then, I apprehend, that if we survey the history and

operations of the General Company, from its first establishment to the present time, we shall be justified in pronouncing it to have totally failed in securing any one of the professed objects for which its charter was given; but, on the contrary, to have been productive of much injury to the interests of the district over which it was appointed to preside. The merchants of Oporto and the farmers of the Douro would, in all probability, have soon recovered from their embarrassments without its interference; their industry, when left to itself, would have been directed into the most advantageous channels; the advancement of physical science would have led to improvements in the culture of the vineyards and the treatment of the wines; and the pernicious practices which had insinuated themselves into the manufacture would have been gradually abandoned, instead of being sanctioned and confirmed by such powerful authority. The manner in which these matters are discussed in the essay to which I have so often referred, and which, considering the circumstances under which it was written, cannot be too highly praised, seems to me to leave little doubt, that, had the wine trade in Portugal remained free from the vexatious fetters imposed on it by the company of the Alto Douro, that country might have supplied us with wines little inferior to some of the best growths of the Bordelais or the Rhone. Since the Methuen treaty has in a manner compelled us to drink Port wine, we may justly complain, that, in consequence of the interference of this body, we have not only had to purchase it at increased prices, but have not even been allowed to procure it in its most perfect state.

By some readers, however, the justice of these animadversions on the general character of the Oporto wines will probably be called in question. To condemn what so many approve may appear presumptuous; and the reference to the influence of long-continued habit will, perhaps, be deemed inconclusive. That the district of the Alto Douro does produce some excellent growths, which may vie with the best that France or any other wine-country can boast, I am

not disposed to deny: but these superior growths are rare, and, for the reasons already stated, they are still more rarely met with in their pure and unadulterated condition. Once or twice, but certainly not oftener, I have tasted such wines, which seemed to be free from any admixture of brandy, and which, with the firmness of Port, united the rich flavour and aroma of the choicest Burgundy vintages. Though extremely old, they preserved their colour entire. Certain of the late importations, too, particularly the wines of 1820, which was a highly favourable year, are of improved quality; and, being of a full and strong body, have been sent to this country with a less addition of brandy than has been usually given to the wines destined for the English market. The introduction of a better system of management would doubtless contribute to their further melioration: and perhaps the method pursued at Lafitte might be recommended for adoption. At all events, it would be desirable to free the grapes partially, if not wholly, from the stalks; to abandon the practice of treading in the vat, and to cover the must during fermentation.

In the course of the foregoing remarks, several other territories have been mentioned as furnishing wines of a quality equal, if not superior, to those of the Douro, and in considerable abundance. Thus the growths of Alenquer, Torres Vedras, Lamego, and Monçaon, which last, in particular, possesses a high celebrity, have been described by NUNES DE LEON as sufficient for the supply of a kingdom[q]. In general, these lighter red wines may be considered as resembling the secondary growths of the Bordelais. The Colares, which is grown at the place of that name near Cintra, is almost the only one which finds its way to this country, where it passes under the denomination of Colares *Port*. The chief WHITE sorts which come to us, are the dry wines of Termo, near the mouth of the Douro; Bucellas, a few miles above Lisbon; and Setuval, in the

[q] Original Documents, p. 9.

province of Estremadura; all of them of very good quality, and, when not spoiled by brandy, of a delicate flavour not unlike some of the stronger French white wines. The sweet wines of Carcavellos and the muscadine of Setuval are too well known to require description. As the growths of the last-mentioned territory are for the most part exported from Lisbon, they usually come into the market as Lisbon wines. MURPHY praises the wine of Barra-a-Barra, in the vicinity of Lavadrio, as being one of the richest that Portugal produces. The common Portuguese wines are, in general, inferior to those of Spain.

CHAPTER V.

OF THE WINES OF GERMANY AND HUNGARY.

VARIOUS epochs have been assigned for the introduction of the vine into Germany. That no vineyards had been planted when TACITUS wrote his description of that country, is very clear: for he declares, that the soil was unpropitious to every kind of fruit tree—"frugiferarum arborum impatiens;" the usual beverage of the people being a kind of beer procured from wheat or barley, and foreign wines being only to be met with in the neighbourhood of the greater rivers[a]. Whether, in the course of the two following centuries, the climate could have undergone such a favourable change as to allow of this species of culture, seems very doubtful: but, though it is not unlikely that the Germans might derive the first vines from their Roman conquerors, yet the commonly received opinion, that the vineyards of the Rhine and Moselle were originally established by PROBUS, does not rest on any satisfactory evidence. When that emperor disbanded his army at Cologne, he is said to have given his foreign legions permission to plant the vine; but VOPISCUS, AURELIUS VICTOR, and EUTROPIUS, who relate the circumstance, do not include the Germans in the list of nations to whom this privilege was granted; specifying only the new plantations that were formed in Mœsia and

[a] "Potui humor ex hordeo aut frumento, in quandam similitudinem vini corruptus. Proximi ripæ et vinum mercantur."—De Morib. Germ. c. 23.

Pannonia[b]. The testimony of AUSONIUS, however, proves, that, a century later, the borders of the Moselle were richly mantled with vines; and that the produce was already distinguished by its delicate perfume, reminding him of the wines of his native country[c]. The banks of the Rhine were still beset with wood; and it probably was not till towards the reign of CHARLEMAGNE, that any attempts were made to clear them, and plant them with vines[d]. From that period the agriculture of Germany has continued gradually to improve; and such has been the melioration of the climate, that it now freely admits of the culture of the vine, in some places, even, as far as the fifty-second degree of northern latitude[e]. If, in these remote situations, the fruit which it bears prove occasionally of indifferent quality, yet, in certain districts, on the other hand, the vintages are brought to a high degree of perfection: and it is worthy of remark, that the best German wines are at present grown beyond the line which has been assigned for the successful cultivation of the vine in France.

From Basle to Mentz the course of the Rhine lies through an extended plain, which, being chiefly alluvial, presents few favourable soils and exposures: but, between the latter city and Coblentz, it is confined within steep banks, which abound in strata propitious to

[b] "Gallis omnibus et Hispanis ac Britannis permisit, ut vites haberent, vinumque conficerent. Ipse Almam montem in Illyrico circa Sirmium, militari manu fossum, lecta vite consevit."—FLAV. VOPISC. in Probo, 18. "Vineas Gallos et Pannones habere permisit. Opere militari Almam montem apud Sirmium et Aureum apud Mœsiam superiorem vineis conseruit, et provincialibus colendis dedit."—EUTROP. Epit. IX. 17.

[c] "Et virides Baccho colles, et amœna fluenta
Subter labentis tacito rumore Mosellæ.
Salve amnis laudate agris, laudate colonis!
Dignata imperio debent cui mœnia Belgæ:
Amnis odorifero juga vitea consite Baccho," &c.—Mosell. 20.

[d] RITTER's Weinlehre, p. 3.—Rheinländische Weinbau, von J. HÖRTER. Coblenz. 1822. P. 11, 12.

[e] At Brandenburg there are about three hundred acres of vineyards.

the grape, and which, rising occasionally into lofty hills, especially towards the northern side, afford the fairest aspects for its cultivation. On both sides of the river, accordingly, we behold extensive ranges of vineyards, yielding a profusion of excellent wines, supporting a numerous population, and giving an air of richness and animation to the scenery, which forms an agreeable contrast to the ruins of feudal magnificence that crown the principal heights. The choicest vintages, however, are limited to a small portion of this district, called the Rhinegau, extending on the right bank of the river from Wallauf, a little below Mentz, to Rüdesheim, and including a space of rather more than nine English miles in length, by about four in breadth: but the produce of some of the vineyards above Mentz, particularly of those at Hochheim, on the banks of the Mayn, is usually classed with the best Rhine wines, being of nearly equal excellence.

Of this territory the prevailing soils consist of decomposed tufa, mixed with marle and gravel, and resting on beds of argillaceous or micaceous schist. The plant generally cultivated is the *riesling*, bearing a small white grape, but requiring a warm exposure. In some places an Orleans grape is grown, and produces a wine which is much esteemed for its peculiar flavour and aroma. The vintage is performed in the most careful manner, and at as late a period as the climate and season will permit. For the white wines, which constitute by far the greatest proportion of those made in Germany, the grapes are separated from the stalks, and fermented in casks, by which means the aroma is fully preserved. The wine is freed from the lees by successive rackings, and, when sufficiently clarified, is introduced into tuns, where it is allowed to mellow, and continues to improve during a long term of years. Those used in the Rhinegau commonly hold eight *ohms*, or five and a half hogsheads; but, in other parts of Germany, they are of larger capacity. Formerly the great proprietors vied with each other in the magnitude of the vessels in which they collected and preserved the produce of their

ment to continue his exertions, but would thenceforth content himself with raising, at the least possible expense, the greatest possible quantity, of a middling quality, or such as he could most readily dispose of, under the name of export-wines. In this way, the finer products of the Douro vintages have remained, in a great measure, unknown to us; and Port wine has come to be considered as a single liquor, if I may use the expression, of nearly uniform flavour and strength, — varying, it is true, to a certain extent, in quality, but still always approaching to a definite standard, and admitting of few degrees of excellence. The manipulations, the admixtures, and, in one word, the adulterations, to which the best wines of the Cima do Douro are subjected, have much the same effect, as if all the growths of Burgundy were to be mingled in one immense vat, and sent into the world as the only true Burgundian wine: the delicious produce of Romanée, Chambertin, and the Clos-Vougeot, would disappear; and in their places we should find nothing better than a second-rate Beaune or Macon wine.

That this view of the prejudicial influence of the company on the manufacture of the wines of the Douro is not founded on mere theory, but is confirmed by facts, will, I think, very fully appear from what has occurred with regard to the white wines of the district. Formerly those wines enjoyed a high reputation, and were perhaps not inferior to the rich growths of Oeiras, Carcavellos, and Lavradio; but since the establishment of the company they have almost disappeared, or are only met with occasionally, and of indifferent quality. The cause of their disappearance or degeneration is this: the farmers found their interest in extirpating the vines which produced them in greatest perfection, such as the *muscatel*, *gouveio*, *malvasia*, &c., and in substituting others, such as the *verdeal*, *rabo de ovelha*, &c., which yield a larger quantity of wine, but of a coarser nature°. On this fact I am disposed to place the greater stress, as the defenders of the company have kept it out of view, and

° Memorias Economicas, Tom. III. p. 137.

because it rests on an authority which they will hardly venture to call in question. It moreover tends to show, that their disparagement of the white wines of Lisbon was wholly unwarranted[P]: for these wines have always maintained a considerable repute, and continue to be supplied of very excellent quality.

When the late revolution in the government of Portugal took place, hopes were entertained, that the privileges which had been so rashly conferred, and so greatly abused, would be entirely done away; or, at least, that such a change might be effected in the constitution of the company, as would deprive it of its objectionable character. Soon after the installation of the Cortes, the policy of the original patent and subsequent enactments was brought under review, in various memorials presented to that body by the corporations of certain towns, and by some of the landed proprietors in the Alto Douro. These papers were printed by order of the Cortes; and a spirited analysis of their contents, drawn up by one of the deputies, in which the mischiefs of all restrictions on commerce and agriculture were forcibly exposed, seemed to warrant the expectation, that the evils complained of were about to be effectually redressed. In the mean time, the company was not inactive. The merchants of Oporto had proposed a plan of reform, which tended to abrogate all its privileges, and to reduce it to a simple mercantile association. The farmers of the Douro, on the other hand, little understanding their own interests, were easily persuaded to give in a counter-petition, praying not only for the continuance of the company, but even for the concession of greater powers than it already possessed; while the directors submitted a project of their own, in which, although they abandoned several of their former claims, such as the right of pre-emption with respect to the wines of the Douro, &c., they took care to reserve one of the most lucrative branches of the company's trade,—namely, the monopoly

[P] See Appendix to Defence, &c. p. 46.

acescency from the slightest exciting causes. Even in some of the strongest and most perfect wines, such as Sherry and Madeira, when long kept in bottle, this deposit may be perceived; but the completeness of their fermentation, and the alcohol in which they abound, ensure them from any further change. With most light wines, however, the case is different. Their feebleness will not admit of the separation of any portion of their tartar, without risking their total ruin: but in Rhine wines, not even the evaporation, which is occasioned by long keeping in the wood, is sufficient to derange the affinities. The proportion of alcohol, indeed, is very sensibly diminished, and the wine becomes more acid than before; but the acidity is still very distinct from that of vinegar, and by no means ungrateful to the palate; while the colour is heightened from a pale yellow to a bright amber hue, and the peculiar aroma and flavour are more fully developed;—thus showing, that no other changes have taken place, than the dispersion of part of the spirit, and the concentration of the remaining liquor.

As these wines are capable of almost indefinite duration, and as their flavour and aroma are always improved by long keeping, it becomes of essential importance to determine the respective characters of the different vintages, for a more extended period than is necessary in the case of most other wines. In favourable seasons, as already observed, the growths of the Rhine are free from acidity: but, in bad seasons, they contain an excess of malic acid, and are consequently liable to those imperfections which have been described as attendant on the presence of that ingredient; and as the moisture of a northern autumn often obliges the grower to gather his grapes before they have attained their full maturity, it is evident that a large proportion of the vintages must be of this description. Hence the wines which have been made in warm and dry years, such as that of 1811, or the year of the comet, as it is sometimes called, are always in great demand, and fetch exorbitant prices. Of preceding vintages, those of 1802, 1800, 1783, 1779, 1766, 1748, and

1726, are reckoned among the best. That of 1783, in particular, is the most highly esteemed of any in the last century.

At the head of the Rhinegau wines is the Johannisberger, grown on the south side of the hill of that name, a little below Mentz, which was first planted by the monks of the abbey of Johannisberg, about the end of the eleventh century. The soil is composed of the debris of various-coloured stratified marle. The grapes are gathered as late as possible. The choicest produce is called Schoss-Johannisberger, and is indebted for its celebrity to its high flavour and perfume, and the almost total absence of acidity. Formerly the best exposures of the hill were the property of the Bishop of Fulda, and it was only by favour that a few bottles of the prime vintages could be obtained from his lordship's cellars. On the secularization of the ecclesiastical states, the Prince of Orange became possessor of the domain; and latterly it has been transferred to Prince von Metternich. During these changes, a considerable quantity of the wine has come into the market: but a portion of that which grows at the foot of the hill is always to be had; and even this is preferable in point of flavour to most of the other Rhine wines, and bears a high price.

Next to Johannisberger may be ranked the produce of the Steinberg vineyard, which belonged to the suppressed monastery of Eberbach, and is now the property of the Grand Duke of Nassau. It is the strongest of all the Rhine wines, and, in favourable years, has much sweetness and delicacy of flavour. That of 1811 is compared by Ritter to the drier kind of Lunel, and has been sold on the spot as high as five and a half florins, or half a guinea the bottle. The quantity made is about three hundred hogsheads, of which sixty are of first-rate quality. Some persons, however, give the preference to the Rüdesheimer wine, which grows on the hill opposite to Bingen. The rock here is composed of micaceous schist, in many places entirely denuded; and the acclivity is so steep, that it has been necessary to form great part of it into terraces, and to carry up in baskets

the requisite quantity of vegetable mould and manure. The Orleans grape is chiefly cultivated, yielding a wine which combines a high flavour with much body, and is freer from acidity than most of the other growths of the Rhine. This may be partly attributed to the favourable exposure, which allows the grapes to ripen fully, and also to the lateness of the vintage, which seldom commences till the end of October, or the beginning of November. The Rüdesheim *Hinterhaüser*, so called from its growing immediately behind the houses of the village, and the Rüdesheimer Berg, or Mountain wines, approach in excellence to the first-rate Johannisberger. An ancient deed, by one of the archbishops of Mentz, shows, that the hills in this neighbourhood were not planted with vines till the year 1074[g].

The vineyard of Grafenberg, which was another appanage of the wealthy convent of Eberbach, but of much less extent than the Steinberg, is still distinguished by the choiceness of its growths. Those of Markebrunne, in the same neighbourhood, and of Rothenberg, near Geisenheim, afford wines which are prized for their softness and delicate flavour.

All the above-mentioned wines are white. Of red wines, the only kind worthy of notice in the Rhinegau is grown at Asmanshausen, a little below Rüdesheim. In good years it is scarcely inferior to some of the better sorts of Burgundy: but the quantity produced is small, and other wines are often substituted under its name.

The Hochheimer, as before observed, is, strictly speaking, a Mayn wine: but a corruption of its name has long furnished the appellation by which the first growths of the Rhine are usually designated in this country[h]. The two chief vineyards at Hochheim

[g] Der Rheingauer Weinbau. 8vo. 1765, p. 5.

[h] Hock is the contraction of *Hockamore*, which, again, is evidently a corruption of *Hōchhēimer*, according to English accent and pronunciation. As the term *Rhenish* is commonly understood to denote an inferior quality, I have, to avoid confusion, adopted the foreign distinction of *Rhine wines*, when speaking of the growths of the Rhinegau, Hochheim, and the neighbourhood.

were in former times the property of the Deans of Mentz, and do not exceed twenty-five or thirty acres in extent: but the surrounding lands yield an abundant produce, which, as in the case of other wines, often passes for the first-rate. The soils are composed of a white or brown marle, mixed with fine gravel, and reposing in some places on strata of coal, which, in hot and dry seasons, is said to impart a particular flavour to the wine.

In the time of SACHS, whose work was published in the year 1661, the wine of Baccharach, a small town below Bingen, appears to have been the most esteemed of the Rhine wines[1]: but HOFFMANN, who wrote about fifty years afterwards, describes the Hochheimer as bearing the palm, and pronounces the Baccharach to be weaker and less durable than the wines which grew further up the river. That so great a change had taken place in the respective qualities of these wines in the course of half a century, is not very probable. The silence of SACHS with respect to the Hochheimer, and some of the other favourite growths, may, therefore, be fairly imputed to his unacquaintance with the better sorts of Rhine wine; for it is very certain, that the Hochheimer was well known in England before the end of the seventeenth century. In the present day, though it still maintains a high character, yet it must give place to the choicer produce of the Rhinegau. It needs scarcely be observed, that the same causes which have led to the degeneracy of some of the most celebrated French wines, have operated equally on those of the territory now under review.

Among the Rhenish wines, commonly so called, the Liebfrauenmilch, which is grown near Worms, and the Scharlachberger, from the neighbourhood of Bingen, rank as the best kinds, and possess considerable body, flavour, and aroma. Those of Nierstein, Laubenheim, and Bodenheim, are of a lighter quality, but have a delicate

[1] "Rhenensia delicata, ex quibus præ reliquis, à natali loco dicta, laudem merentur Baccharacheia."—Ampelographia, 8vo. Lipsiæ, p. 454.

perfume and taste. Most of the other growths of the Upper and Lower Rhine can only be classed with the first-rate ordinary wines.

Except in very favourable seasons, the Moselle wines generally fall into the same rank. But the produce of certain spots on the banks of the river, such as Braunenberg, Pisport, Zeltingen, Wehlen, and Graach, is often of superior quality. The better sorts are clear and dry, with a light pleasant flavour and high aroma, not unlike that of the best Graves wines; but sometimes contract a slaty taste from the strata on which they grow. They arrive at maturity in five or six years; though, when made in a favourable season, they will keep twice that time, without experiencing any deterioration.

Of the remaining German wines, few are deserving of particular notice. The banks of the Neckar, indeed, yield a red wine, which some persons have ventured to compare to the best growths of the Garonne; and Franconia and Swabia supply a number of white wines, which approach more or less in quality to those of the Rhine, and sometimes pass for such. The Stein and Leisten wines, which grow on rocky soils in the vicinity of Würzburg, are much esteemed on account of their agreeable flavour and freeness from acidity. But, as we advance further south, the vintages degenerate; for in the Austrian states, the wines are almost all of inferior quality, being sharp, and often entirely acid. Nevertheless, from the long use of such wines, the natives prefer them to any others, and even consider their sourness as a criterion of excellence. In Moravia, however, several generous wines are produced, that vie with those of Hungary; and in the Tyrol we meet with some very good red wines, which resemble some of the better growths of Italy, but, like them, will seldom bear keeping.

Hungary contains numerous vineyards: but as they are chiefly in the hands of the peasantry, who pay little attention to the selection of the grapes, or the separation of the ripe from the unripe fruit, the good wines which this country furnishes are limited to a few districts. The excellence, however, of the Tokay, and some other

kinds, shows to what perfection the produce of the Hungarian vines may be brought by a more careful system of management.

The Tokay wine, although it takes its name from the town or hill of Tokay, is, properly speaking, the produce of various vineyards in the tract of country which extends twenty-five or thirty miles to the north-west of Tokay, and is called the Hegallya, or Submontine district. Although these vineyards are noticed by a writer who flourished towards the close of the fifteenth century, yet they had acquired no peculiar fame; and it was not till about the year 1650 that Tokay wines came into vogue, in consequence of the improved method of preparing them from picked and half-dried grapes, which appears to have been then practised for the first time[k]. The strata are all volcanic, and the best wines grow on soils formed of black trapp, or decomposed porphyry, porcelain-clay, and feldspar. Several species of grape, mostly white, are cultivated, which ripen early, and yield much saccharine juice. That called *furmint*, or *formiant*, is deemed the best. When first planted, they are cut down at a knot, within a span from the ground, and the superfluous young shoots are pruned at the same place every spring. In consequence of this repeated pruning, the knot swells, and often becomes very large; and the plants are distinguished by the appellation of *knob-vines*. In order that the fruit may attain its fullest ripeness, the vintage is delayed as long as possible, seldom commencing till the end of October, or the beginning of November; by which time, in favourable seasons, a considerable number of the grapes have become shrivelled, and half-dried. These are called *trockenbeeren*, or dry grapes, being chiefly supplied by the above-mentioned species of vine; and, as it is on them that the luscious qualities of the Tokay wines depend, they are carefully separated from the rest. When a sufficient quantity has been collected, they are introduced into a

[k] Notitia Historica Montium et Locorum Viniferorum Comitatus Zempleniensis. Auctore A. Szirmay de Szirma. Cassoviæ, 1798. P. 39.

cask, the bottom of which is perforated with small holes; and the juice, which exudes from them without any further pressure than what proceeds from their own weight, constitutes the syrupy liquor termed Tokay Essence. This keeps without any further preparation, and is highly valued; though it always remains thick and muddy. To obtain the *ausbruch*[1], which is the next variety of wine, the *trockenbeeren* are trodden with the feet, and a portion of must from common grapes is poured over them,—the quantity varying according to the nature of the grapes and the quality of the wine desired; being for the richest sort only about half as much as is allowed for the inferior kind, or *maslas*. By this addition, the aromatic principle, which in some of the Tokay grapes is very powerful, becomes more fully extracted from the skins. The mixture is now stirred strongly, and the hulls and seeds, which rise to the surface, are separated by means of a net or sieve. It is then covered over, and in forty-eight hours generally begins to ferment. The fermentation is allowed to continue three days, or more, according to the state of the weather; and during its continuance, the must ought to be stirred morning and evening, and the seeds carefully taken out. When the process is thought to have sufficiently advanced, the liquor is strained, through a cloth or sieve, into the barrels in which it is to be kept; but it does not become bright till about the end of the following year.

From the above account it is evident, that the Tokay-Essence corresponds exactly with the *protropon* of the ancients, according to the definition given of it by PLINY,—"mustum sponte defluens, antequam calcentur uvæ;" while the *ausbruch* may be considered as identical with the *passum*[m]. The former is rather a syrup than a wine: the latter possesses more of the vinous quality, but retains

[1] *Ausbruch* (from *ausbrechen*, to break out,) may be considered as synonymous with the French term *première goutte*, and signifies the juice which flows on the first bursting of the grape.

[m] See PART FIRST, p. 40.

a degree of lusciousness, which persons accustomed to the austerer wines do not always relish. "Tokay," says Dr. Townson, "is, no doubt, a fine wine, but, I think, no ways adequate to its price: there are few of my countrymen, except on account of its scarceness, who would not prefer to it good claret or Burgundy, which do not cost one-fourth of the price. Some of the sweetish Spanish wines, begging its pardon, are, in my opinion, equally good; and, unless it be very old, it is too sweet for an Englishman's palate[n]." The maslas, as may be conceived from the nature of its manufacture, is less sweet; and an imperfect ausbruch is often changed into a maslas wine. The produce of the vineyards of Tarczal, Tokay, and Mád, is accounted the sweetest; while that of Tállya has the reputation of the greatest strength. The whole quantity made in the Zemplin district is computed by the author above quoted at eighty thousand *dolia;* by which he probably means *antals*, or casks containing about fourteen gallons each[o].

When new, the Tokay wines are of a brownish yellow colour, and exhale a peculiar odour, which has been compared to the smell of pumpernickel (a species of bread used in some parts of Germany, and made of unbolted rye). When very old, the colour is said to change to greenish. Although it abounds in saccharine matter, yet, undergoing but an incomplete fermentation, it is sometimes apt to fret and spoil, especially when the produce of wet seasons, and of grapes that have contracted any degree of mouldiness. In this way several casks of ausbruch wines, of the vintages of 1789 and 1792, when the autumns proved very rainy, were found to have become completely acid in the course of two or three years, in the emperor's cellars at Tarczal and Vienna[p]. Such accidents, however, are rare, and, in general, the Tokay wines may be reckoned among the most lasting of their kind. In Poland and Silesia, where they are in great

[n] Travels in Hungary, by Robert Townson, LL.D., &c. p. 269.

[o] Notitia Historica, &c. p. 14.

[p] Ueber Tokay's Weinbau, von J. D. von Derczen. Wien, 1796, p. 12.

demand, the oldest only is drunk; and at Cracau, where the chief deposit of them is established, some vintages are said to have been kept a whole century. In this state it is called *vino vitrawno*, to distinguish it from the new and sweet, *vino slotki*, and sells generally at from four to six, and in some instances as high as eight ducats the bottle. When the emperor of Austria wished to make a present of some Tokay wine, in return for a breed of horses which had been sent him by the ex-king of Holland, the stock in the imperial and royal cellars was not deemed sufficiently old for the purpose, and two thousand bottles of *vino vitrawno* were therefore procured from Cracau, at the extravagant price of seven ducats the bottle[q].

The *ausbruch*, however, is not confined to Tokay, but is made at St. Georgy, Œdenburg, Ratchdorf, and in Sirmien; and the red Méneser *ausbruch* is by some preferred to Tokay. It is less cloying, but has a rich, aromatic, and somewhat pungent flavour, similar to that of the finer Italian sweet wines. According to Dr. Bright, the Sirmien vineyards, which had been destroyed and long neglected after the battle of Mohacs, have again become very productive, and yield, besides the ausbruch, a particular sort of sweet and strong red wine, called Schiller wine, which is in great repute. The Schiracker, made in the Nagyhonter Comitatus, is said to resemble Champagne[r]. The best Hungarian table-wines come from Erlau: the next best, from Ofen.

[q] Ritter's Weinlehre, p. 118.

[r] Travels through Lower Hungary, p. 418—20.

CHAPTER VI.

OF THE WINES OF ITALY AND SICILY.

OF all the countries in Europe, Italy might be expected to produce the choicest wines. Its genial climate, and the long range of mountains which extend from the foot of the Alps to the extremity of Calabria, and present, in their course, every variety of soil and exposure the best adapted to the culture of the grape, seem to justify the alleged origin of its ancient name, *Œnotria*. But, as generally happens, where nature is most bountiful, man becomes unmindful of her gifts, and ceases to improve the advantages of his situation according to his means and ability. In more northern latitudes, the utmost skill and industry are required to protect the vine from injury: but in Italy, where it grows almost spontaneously, and an early summer secures the full maturity of its fruit, little labour and attention are necessary to produce an abundant vintage. Hence the vines that attach themselves to the fences or trees, which bound his fields, commonly supply the Italian peasant with a sufficient quantity of wine for his consumption; and the intermediate land is devoted to other crops. Even in those situations, where the proprietor is induced to bestow more care on its culture, the vine still appears but a secondary object; being usually trained to pollard elms, poplars, or mulberry-trees, with Indian corn or olive trees between the rows. In certain provinces, as in Lombardy and the Campagna, it is raised on poles, or treillises, but still allowed to shoot up to the height of ten or fifteen feet. In the neighbourhood of Barletta and Otranto,

however, and a few other spots in the Neapolitan kingdom, and in some parts of Piedmont, it is pruned within two or three feet from the ground, according to the more approved practice.

If appearance alone were studied, the bald and stunted vines of Burgundy or Champagne must yield to those of Italy, where they are allowed to send forth their foliage full and unbroken, and their branches, entwining round each other, and occasionally forming festoons from tree to tree, contribute to variegate and adorn the landscape. But, unfortunately, as we have seen, the quality of the wine is almost always in the inverse ratio of such exuberance of growth. Yet this mode of culture is still practised, notwithstanding its many disadvantages; and so rooted is the common prejudice in its favour, even where sounder maxims are beginning to prevail, that in a very sensible dissertation on the improvement of the Tuscan wines, recently published by the Marquis Ridolfi, we find the ancient marriage of the vine with the poplar recommended in preference to the use of stakes, on the plea that the greater abundance of the produce makes up for the defects in quality[a].

In other respects, the management of the Italian vineyards is equally faulty. Notwithstanding the multitude of appropriate soils and exposures with which the country abounds, "it often happens," as M. de Bonstetten has justly remarked, "that the vines are planted in the corn land, and the corn is grown where the vines ought to be; that the meadows are covered with woods, while the woodlands are left bare. Near Cantalupo," he continues, "I have seen steep and rocky fields laid out in corn, which scarcely doubled the seed, while the vineyard was placed in the richest and best watered soil; and about one-third of the cattle perished from want of fodder, during a fortnight that the ground was covered with

[a] "Ovunque il pioppo prospera, non gli si antepongano le viti a palo. La miglior qualità del vino che queste producono non è proporzionale alla maggior quantità, e gli altri vantaggi che si ha da quello, tanto più che si può aver anche dai pioppi un ottimo vino coll'arte."—*Atti dell'Accademia dei Georgofili.* Firenze, 1818. P. 516.

snow. The Italian farmer, having but little land, and still less capital, does not look beyond the quickest produce, and that which lies most immediately within his slender means[b]."

In spite of all these errors in the culture of the vine, the great superiority of the climate would probably still ensure a high rank to the Italian wines, if more skill were displayed in the manufacture of them. But on this point the ignorance, the obstinacy, and the carelessness of the natives, are almost incredible. No pains are taken to separate the different species of grapes, either in the planting, or in the vintage; they are gathered indiscriminately, and often before they are ripe; and, as the landlord generally divides the crop with the tenant, and each makes his own wine, they are liable to be much bruised before they reach the place where they are fermented; no nicety or cleanliness is shown in conducting that process, or in removing the liquor into the cask; in short, the wine is often spoiled irrecoverably, before it has left the vat. "In conversation with the Abbate FORTIS on the wine of the Paduan being so bad," MR. YOUNG was told, "that it is owing entirely to the bad management in making. They tread the grapes with their feet; put the juice in a great cuve; and will keep it fermenting there even so long as fifteen days, adding every day more and more, till the strength is exhausted, and the wine spoiled; no cleanliness in any part of the operation, nor the least attention in the gathering or choice of the grapes[c]." In the southern parts of Italy matters are managed still worse. "The wine-makers of Latium," says M. DE BONSTETTEN, "seem to be totally ignorant of the first principles of the art. At Albano, I have seen the finest grapes in the world introduced into casks placed on end, and open at the top, in which the wine remained exposed to the air during forty-five days; for such was the rule. After this, it could hardly

[b] Voyage sur la Scène des Six derniers Livres de l'Enéïde, p. 281.

[c] Travels in France, Vol. II. p. 239.

keep a year, or eighteen months. Throughout almost the whole of Italy the grapes are gathered too early; the must is put into small and dirty vessels, and left to all the consequences of a careless and destructive fermentation[d]."

Other causes also contribute to the inferiority of the wines of Italy, which operate more or less throughout all its provinces. In consequence of the vexatious and highly impolitic regulations by which the internal traffic of that ill-fated country is fettered, the inhabitants of the different states, and even of particular districts or parishes, are, for the most part, obliged to content themselves with their own growths, however unsuitable the soils may be for the cultivation of the vine, and however much the adjoining territories may be favourable to it. Of the manner in which the price of wine is affected by these absurd restrictions, Mr. Stewart Rose gives a remarkable instance, in his interesting Letters from the North of Italy. "Being parched with thirst," he observes, on the occasion of a visit to Arquà, "I was directed to a little public-house, where I begged a tumbler of wine, and was presented with some which might have passed for nectar. When I asked the price, I was told it was three Venetian soldi, equivalent to three farthings of our money; yet the poison produced by the plains of Padua cost five in that city. Here, then, was a wine, which, if bottled for two years, would be equal to the good white wines of Gascony, nearly confined to the Euganean hills, though sold on the spot for little more than half the price, and only ten miles from Padua, with the facility of water carriage for more than half the distance. On my return to Padua, I inquired if it was not possible to have a bottle of this 'precious liquor.' I was answered 'yes,' and presented with a list of *foreign* wines, and this amongst them, with the annexed price of two francs, which is nearly ten times as much as it cost at Arquà; and this in consequence of the impediments thrown in

[d] Voyage, &c. p. 283.

the way of commerce, to which I have already alluded. Yet we wonder at the want of industry and activity of the Italians[*]."

Such being the actual state of the art of wine-making, and of the wine trade, in Italy, we may readily conceive, that the complaint of PLINY, that several of the celebrated wines had fallen into disrepute, in consequence of the carelessness of the farmers, and the short-sighted avarice of those who were more intent on quantity than quality, fully applies to the present growths. The topography of the ancient vineyards, therefore, will afford us but little insight into the characters of the modern Italian wines. The Falernum and Cæcubum, which inspired the muse of HORACE, and warmed the heart of CATO, have disappeared from the soil; and the Rhæticum, which called forth the eulogy of VIRGIL, as being second only to Falernum, would now be sought for in vain in the Veronese territory. Even in the time of BACCI, this district of Italy appears to have produced several esteemed growths; but the ordinary wines made there at present are the very worst which it has fallen to my lot to taste.

From this general censure on Italian wines, however, those of Tuscany deserve to be excepted: not that they rank with the first growths of France, or equal the wines of Spain or Portugal in strength and durability; but because the process of wine-making is better understood, and a greater number of good wines are produced in the Tuscan dominions, than in any of the other states of Italy,—probably owing to the greater freedom of commerce which the people enjoy. Certain it is, that the Grand Dukes have taken considerable pains to improve their vineyards, by importing the best species of vines from other countries, as, for instance, from France, Spain, and the Canaries; and the wines made at their villas show that their labours have been attended with considerable success. If, indeed, we were to adopt the classification which REDI has given

[*] Letters from the North of Italy, Vol. I. p. 82.

of the wines of his country, in his charming dithyrambic, entitled 'Bacco in Toscana,' we might suppose, that they were the first in the world; as they certainly might be, if a better choice were displayed in the soils appropriated to their growth, and if greater science were displayed in the fermentation. That it is not from ignorance on the former of these points, that the Tuscans so often err, appears from several passages of the poem just mentioned, in which the author anathematizes those who first dared to plant the vine on low soils, and celebrates the excellence of the juice which flows—

——————— "dall' uve brune
Di vigne *sassosissime* Toscane."

"Among the ancient laws of the city of Arezzo," he remarks, in a note, "was one, granting free permission to plant vines on such hills as were calculated to produce good wine, but strictly prohibiting the cultivation of them on the low grounds destined to the growth of corn[f]." The injudicious method, also, of training the vine excites his just indignation[g].

In the description of Tuscan wines, much confusion has arisen from not attending to their different qualities. As the press is little used, and the grapes have, in general, attained their full maturity, being, besides, in the case of the choicer wines, dried for six or seven weeks within doors before they are trodden; the first juice (*mustum lixivium*) necessarily abounds in saccharine matter, and

[f] Opere di Francesco Redi, Vol. I. p. 51. (Ed. Milan. 1809.)

[g] "Bramerei veder trafitto
Da un serpe in mezzo al petto
Quell' avaro villanzone,
Che per render la sua vite
Di più grappoli feconda,
Là ne' monti del buon Chianti,
Veramente villanzone,
Maritolla ad un brancone."

the wine procured from it will consequently belong to the sweet class. But, when this is drawn off, it is customary to add a quantity of water to the murk, which, after a short fermentation, yields a very tolerable wine; and a repetition of the process furnishes an inferior sort. In this way, a great proportion of the ordinary wines of the country are made; but all the choicest growths, all the *vins d'entremets*, are more or less sweet. When a late traveller, therefore, describes the Montepulciano wine as the most esteemed in the Tuscan states, and at the same time compares it to "a weak claret, with little flavour[h]," it is evident, that he cannot be speaking of that "manna of Montepulciano, which gladdens the heart," and which REDI, with excusable partiality, pronounces to be the "king of all wine[i];" but must mean the common wine of the place, which may have been set before him as the best growth. Another source of error arises from the circumstance of several of the best Tuscan wines receiving their appellations from the grapes which yield them, as, for example, the *Aleatico*, the *Columbano*, the *Trebbiano*, the *Vernaccia*, &c.; and as these names are not confined to Tuscany, but are common to the growths of other parts of Italy, the difficulty of distinguishing them is still further increased.

The *Aleatico*, or red muscadine, which is produced in the highest perfection at Montepulciano, between Sienna and the Papal state; at Monte-Catini, in the Val di Nievole; and at Ponte-a-Moriano, in the Lucchese territory, and of which the name in some measure

[h] Journey in Carniola, Italy, &c., by W. A. CADELL, Vol. I. p. 264.

[i] "Versa la manna di Montepulciano;
Colmane il tonfano, e porgilo a me—
Questo liquore, che sdrucciola al core—
O come l'ugola e baciami, e mordemi!
O come in lacrime gli occhi disciogliemi!
* * * * * *
Montepulciano d'ogni vino é il rè."—*Bacco in Toscana*, p. 31.

expresses the rich quality[k]; has a brilliant purple colour, and a luscious aromatic flavour, but without being cloying to the palate, as its sweetness is generally tempered with an agreeable sharpness and astringency. It is, in fact, one of the best specimens of the *dolce-piccanti* wines; and probably approaches more than any other to some of the most esteemed wines of the ancients. The rocky hills of Chianti, near Sienna, furnish another sort of red wine, which is made from a different species of grape, equally sweet, but rather less aromatic: and at Artimino, an ancient villa of the Grand Dukes, an excellent claret is grown, which REDI places before the wine of Avignon. The wine of Carmignano is also held in much estimation.

These are the chief RED wines of Tuscany. Formerly several WHITE sorts were made, of which the *Verdea*, so called from its colour inclining to green, was in high repute. FREDERIC the SECOND of Prussia preferred it to all other European wines[l]; and, in the time of our JAMES I., to have drunk Verdea is mentioned among the boasts of a travelled gentleman[m]. The best used to be made at Arcetri, in the vicinity of Florence. Next to it ranks the Trebbiano, so called from the grape of that name, and much extolled for its golden colour and exquisite sweetness; being, in fact, rather a syrup than wine. For making it the sweetest grapes are chosen, and, according to ALAMANNI, partly dried in the sun, after having had their stalks twisted[n]. The fermentation continues four or five days; the wine is then introduced into the cask, and undergoes

[k] It is obviously derived from ἡλιάζω, *soli expono.*

[l] FABBRONI, Arte di fare il Vino, p. 209.

[m] "And must this piece of ignorance be pop'd up,
Because it can kiss the hand, and cry 'Sweet Lady,'
Say, it had been at Rome, and seen the relicks,
Drunk your *Verdea*-wine," &c.—*The Elder Brother,* Act ii. Sc. 1.

[n] La Coltivazione, Libro iii.

repeated rackings during the first six weeks or two months. It appears from SISMONDI's account, that most of the Tuscan white sweet wines now pass under the denomination of Trebbiano°; but there is very little made, the white grapes being chiefly consumed in the manufacture of red wines.

As the fermentation in the vat is often continued an undue length of time, it frequently happens, that the wines, before they are removed into the cask, contract a degree of sharpness or acidity, which greatly injures their durability. It may also be remarked, that the wood of which the casks generally used in Tuscany are made, viz. the chesnut, being very porous, the wine exudes or evaporates so quickly through them, that it becomes necessary to replenish them once a week, or oftener; and when this operation is diligently performed, the contents are liable to fret, in consequence of such disturbance, especially if there should be much difference in the quality or age of the wine added. These circumstances, connected with the management, will sufficiently account for the frequent complaints concerning the little durability of the Tuscan wines: but when they are of sound quality, and are treated with sufficient care, they may be kept in the flask during a considerable number of years, and often come to this country in very good order.

In the Papal states, the light white muscadel wines of Albano and Montefiascone, and the red and white wines of Orvieto, are the only kinds deserving of particular mention; but as they do not bear distant carriage, they are seldom met with out of the country where they are produced.

The wines of the Neapolitan territory maintain a much higher character, especially the sweet wines which grow on the volcanic soils of Vesuvius, of which there are three principal sorts; viz. 1st, the *Lacrima Christi*, a red luscious wine, better known by name

° Tableau de l'Agriculture Toscane. Genève, 1801, p. 162.

than in reality, as it is made but in small quantity, and chiefly reserved for the royal cellars; 2dly, a muscadine wine of a rich amber colour, and fragrant aroma; and 3dly, the *Vino Greco*, also a sweet wine, deriving its appellation from the grape that yields it. The best *lacrima* is that of Monte Somma and Galitte: but many of the second-rate wines made in the vicinity, as those of Pozzuolo, Ischia, Nola, Ottajano, Novella, and Torre del Greco, take the name of *lacrima*, and pass in commerce for the first growths. Several parts of Calabria, particularly the environs of Tarento, Bari, and Reggio, produce excellent sweet wines, as well as some dry, which have been thought to approach to the secondary kinds of Burgundy.

To the wines of Sicily the observations which have been offered on the general character of those of Italy, apply in full force. The same advantages for the growth, and the same imperfections in the treatment of the vine; the same errors in the fermentation, and the same inattention to cleanliness; in short, the same ignorance, obstinacy, and slovenliness, are displayed throughout the whole system of management, and, as might be expected, are productive of nearly the same results. Nevertheless, the vintages of several spots maintain their ancient repute, and the total produce of the island is considerable. Contrary to what occurs in Italy, the white wines here are most numerous, and, also, by far the best. Those of Mazzara and Marsala, which have been long known in England, greatly resemble some of the Lisbon or Termo wines, or the lighter kinds of Madeira. The red and white muscadine wines of Syracuse are also occasionally met with, but do not equal the choicest Tuscan vintages. Within these few years, the free trade which has been carried on between this country and Sicily, has brought us fully acquainted with the growths of the hills at the foot of Mount Etna, which may be regarded as one vast vineyard, producing a great variety of wines, according to the different soils and exposures. But, either from the mistaken notions which the Sicilian wine-

dealers have formed of our taste in wine, or from their cupidity, which has led them to export a number of the inferior growths disguised with brandy, this species of adulteration has been carried to an unexampled extent in most of the cargoes that have been recently imported from that district: and as the Sicilian brandy has a peculiarly harsh flavour, which no treatment will mellow, and no age subdue, the wines in question have deservedly fallen into disrepute, having all the worst qualities of the worst Port and Madeira.

CHAPTER VII.

OF THE WINES OF GREECE, AND OF THE ISLANDS OF THE ARCHIPELAGO AND IONIAN SEA.

HEN we consider the degrading bondage which the descendants of the ancient Greeks have so long endured, but from which they are now happily emancipating themselves, we can feel no surprise at the decline of that spirit of enterprise and industry, for which their nation was once so pre-eminently distinguished. Wherever the Turkish arms have penetrated, desolation has followed in their train. Lands, which, in former times, yielded the richest harvests, have been suffered to run to waste; whole districts have been abandoned; and the wretched inhabitants who remain, enjoying no security of person or property, after being forced to contribute one-seventh of their crop to a government which is constantly harassing and oppressing them, can look forward to little improvement in their circumstances by increased exertion; and are, therefore, generally content to snatch, by a hasty and imperfect cultivation of the soil, the few productions required for their immediate subsistence. It is only in those islands which have remained longest exempt from the baneful presence of the Turks, or where the Greeks, by the preponderance of their numbers, have been enabled to secure a slight degree of freedom, that agriculture and commerce have made any progress, or, to speak more correctly, have not been altogether neglected. While under the Venetian republic, Candia and Cyprus supplied the whole of Europe with the finest dessert wines; and so abundant was their produce, that,

towards the end of the sixteenth century, the former island alone, if we may credit Bacci, sent annually to the shores of the Adriatic not less than two hundred thousand casks of malmseys[a]. Since it has experienced the miseries attendant on Turkish sway, the Greek population has gradually diminished; the manufacture of wine has been confined to a few districts; and the quantity procured is insufficient to meet the wants of the inhabitants[b]. When Mr. Drummond travelled, the average amount of the exportation from Cyprus was estimated at 365,000 *cuse*, or 973,333 gallons, and the total produce of the wine harvest at 800,000 *cuse*, or 2,133,333 gallons[c]. About fifteen years ago, the quantity exported was reduced to 65,000 *cuse;* and the supply of common red and white wines for internal consumption was only about as much more. Such is the change effected by the government of the Captain Pacha, in whom the property of this fertile island is now vested!

Throughout nearly the whole of Greece, the soil is highly favourable to the vine. On the continent, the extensive ranges of mountains, which intersect the country, are chiefly calcareous. In those islands which have been celebrated for their general fertility, and the superiority of their wines, as Scio, Tenedos, Candia, Zante, &c., similar strata occur: in others, where the growths are of equal repute, as Lesbos, Naxos, and Santorini (the Thera of the ancients), the rocks are of volcanic origin. The variety of climate and choice exposures, which the elevated grounds present, serves to diversify, to an infinite degree, the quality of the wines obtained; and in many districts the method pursued in the cultivation of the vine must be acknowledged to be far from injudicious. It is cut near the root, and allowed to extend its branches laterally; and in the

[a] Naturalis Vinorum Historia, p. 331.

[b] Voyage dans l'Empire Othoman, &c. Par G. A. Olivier. Paris, An VII. Tom. I. p. 406.

[c] Travels through different Cities of Germany, Italy, and Greece. By Alexander Drummond. London, 1754, p. 156.

best vineyards the employment of manure is avoided. Nothing, in short, is wanting to secure a produce equal to that of the Hermitage or of Madeira, but a more skilful treatment of the vintage, and the abandonment of those deleterious admixtures, which, in conformity to long established prejudices, are still very generally resorted to. The grapes, for the most part, are gathered indiscriminately, and thrown into an open cistern, where they are exposed to the full influence of the atmosphere; and, as they are often half-dried before they are trodden, a quantity of water is added to them, in order to facilitate the fermentation. Salt, baked gypsum, and lime, are used to correct the sweetness of the liquor; and a portion of rosin is commonly introduced, as in ancient times, to imitate the pungency of old wine. In some places, the product of the fermentation is collected in skins smeared with tar, which impart a disagreeable flavour, and render it unfit for use, until it has been mellowed by long keeping: but the poverty of the farmers will seldom allow them to adopt the proper means for preserving their wines. Hence it comes, that the lighter growths often turn entirely acid in the course of a few months after the vintage; and only the stronger kinds will keep beyond the year. In those situations, however, which have been favoured by commerce, and where subterraneous cellars have been formed, wines of considerable age may be occasionally met with. "The red wine of Ithaca," a late traveller observes, "is excellent, superior to that of Tenedos, the Greek wine which it most resembles; but it is generally much injured, sometimes spoiled, by the injudicious manner in which it is kept. In the possession and management of the British commandants at Cephalonia and Ithaca, we found it a delightful wine, with a Hermitage flavour, and a good sound body[d]."

In the present, as in former times, the best Greek wines are of the luscious-sweet class. Those made in Cyprus and Tenos, the red

[d] Travels in Italy and Greece; by H. W. Williams. Vol. II. p. 201.

muscadine of Tenedos, and the white muscadine of Smyrna, vie with the richest Hungarian wines. Several of the islands, however, as Ithaca, Cephalonia, Candia, and Cyprus, yield abundance of dry red wines, which resemble the secondary growths of the Rhone, and which, with a little more care in the manufacture, might be rendered fit for general exportation. Even now a considerable quantity is sent to the ports of the Black Sea. The red wine of Corfu is distinguished by its lightness and delicacy. In the island of Zante a wine is made from the Corinth grape, which is said to approach to Tokay.

Candia and Cyprus alone, if properly cultivated, would be capable of supplying us with every variety of wine. In the former island, the vineyards of Kissanos yield an agreeable claret; while those of Rethymo give a fine-flavoured white wine, which keeps very well; and the malmsey made by the caloyers of Canea, and on the hills adjacent to Mount Ida, has been long in high estimation. In Cyprus, the domain called the *Commendaria*, from its having belonged to the Knights of Malta, affords the choicest sweet wine. When new, it is red; but, as it advances in age, it grows tawny, and improves in delicacy and flavour, till it surpasses almost all the other wines of the Archipelago. The white muscadine of Cyprus is also an excellent dessert wine, but has generally a disagreeable taste of the tar or pitch used for coating the bags in which it is conveyed from the mountains. According to Olivier, however, the white wine of Santorini, known under the name of *vino santo*, ranks before the best growths of Cyprus. It is principally exported to Russia[e].

The scarcity of wood in many of the islands has led the natives to use vats of masonry, which, when well made, and kept properly clean, answer the purpose very well. "Every private man," says Tournefort, "has in his vineyard a sort of cistern, of what dimen-

[e] Voyage dans l'Empire Othoman, &c. Tom. I. p. 361.

sions he thinks fit; it is made square, well walled, and cemented with brick mortar; open at top. In this they stamp the grapes, after letting them lie two or three days to dry: as fast as the must runs out at a certain hole of communication into a basin placed below the cistern, they pour it into leathern budgets, and carry it to town, where they empty it into casks of wood, or large earthen jars, buried up to the neck in the ground: in these vessels the new wine works as it may; they throw into it three or four handfuls of white lime plaster, with the addition now and then of a fourth part of fresh or salt water. After the wine has sufficiently worked, they stop up the vessels with plaster[f]."

In most of the islands, the processes adopted in the making of wines are, with few exceptions, the same. In Cyprus, for the best muscadine wines, they twist them on the stalk a short time before they are gathered. "At Scio," according to the author last quoted, "they plant their vines on the hills, and cut the grapes in August, and let them lie in the sun to dry for seven or eight days, after which they press them, and then let them stand in tubs to work, the cellar being all the while close shut. When they would make the best wine, they mix among the black grapes a sort of white one which smells like a peach kernel; but in preparing nectar, so called even to this day, they make use of another kind of grape, somewhat styptic, which renders it difficult to swallow. The vineyards most in esteem are those of Mesta, from whence the ancients had their nectar. Mesta is, as it were, the capital of that famous quarter called by the ancients Ariousia[g]."

On the continent of Greece, although there is no want of the finest situations on the slopes of the calcareous mountains that divide the country, the poor peasants are induced, by the temptation of a larger produce, and the saving of labour, to plant their vines on the low lands, which are generally marshy in the winter, and conse-

[f] Voyage into the Levant, Vol. I. p. 125. [g] Ibid. p. 283.

quently very unpropitious to the finer qualities of the grape. The vintage is collected with little care, and is usually trodden out on platforms in the fields, whence it is conveyed in skins to the towns and villages, to undergo an imperfect, or an excessive fermentation. In order to give the indifferent wine thus obtained a little more body, a large quantity of the resin of the pine-tree is added: but even with this assistance it will hardly keep till the next summer; and during the hot months of the year, the Greeks seldom drink any thing better than vinegar. In fact, it is only in this state that the liquor becomes clear: until it is sour, it is always muddy. In some parts of Macedonia, however, very tolerable wines are met with. Here are several towns which have long flourished by their overland traffic with Germany; and many of the inhabitants, having resided long in that country, have introduced a better mode of making wine, and the use of subterraneous cellars. The climate of the greater part of Macedonia, it may be observed, is colder than any other southward of the Alps, and therefore between this province and the Archipelago we should undoubtedly find abundance of sites capable of producing every variety of wines to be found in France and Spain. The Morea no longer affords any but the worst quality, although it is the original country of the Malvasia or malmsey grape, from which the sweet wines of Madeira, Malaga, and other places, derive their name.

CHAPTER VIII.

OF THE WINES OF MADEIRA AND THE CANARY ISLANDS.

MOST of the wine countries which now yield the choicest produce, have been indebted to Greece for their vines. Those of Crete, in particular, were long sought for, in preference to all others; and, where the climate has been congenial, they seem to have experienced no degeneration in their adoptive soils. At a very early period they were introduced into Spain and Portugal, and thence propagated to the more northern regions of Europe. The island of Madeira, however, is said to have been stocked with plants brought directly from Candia, by order of PRINCE HENRY, under whose auspices the first colony of the Portuguese was established there, in the year 1421. The mildness of the climate, and the volcanic soils with which that island abounds, were so favourable to their growth, that, if we may credit the report of the Venetian traveller, ALVISE DA MOSTO, who stopped there on his voyage to Africa in 1455, they produced more grapes than leaves, and the clusters were of extraordinary size. The manufacture of wine, too, had already commenced, and the quantity produced was sufficient to allow a certain portion to be exported[a]. But, for a long time, sugar was the principal commodity

[a] " Vi nascono vini assai buonissimi secondo l'habitation nova; e sono tanti che bastano per quelli dell' isola, e se ne navica ancora fuori assai, fra le cui vite il detto signor (Don Henrico) fece mettere piante, overo rasoli di Malvasie, che mandò a torre in Candia, quali riuscirono molto bene; e per esser il paese tanto grasso, e buono, le vite producono quasi piu uva che foglie, e gli graspi sono grandissimi di lungheza di duoi

which Madeira supplied; and it was not until a comparatively recent period that its wines became generally known, and acquired that distinction to which their many valuable qualities so justly entitle them.

The north side of the island, though sufficiently fertile, being exposed to cold winds and fogs from the sea, is necessarily less suitable to the culture of the vine than the south side, where all the best vineyards are accordingly situated. The soil most commonly met with consists of pumice-stone, mixed with a portion of clay, sand, and marle; on several of the lower hills, nothing but black or grey volcanic ashes are seen; and the higher lands are generally covered with a soft lava, which rests upon a stratum of black ashes. As the acclivities are often very steep, they are partly formed into terraces, to prevent the loose earth from being washed away: and, to counteract the effect of the summer droughts, water-courses are constructed along the sides of the mountains, which enable the farmers to irrigate their vineyards as occasion may require.

Among the various species of grapes cultivated, those called *verdelho*, *negra molle*, *bual*, *malvazia*, and *sercial*, yield the best wines. They are propagated by quicksets or cuttings, and planted in rows; the ground being always trenched sufficiently deep to allow the roots to penetrate into the substratum of volcanic ashes. Some are left without support, and kept low by frequent pruning; others are trained on square frames or treillises, from twenty to thirty inches high; while others, again, are disposed on a sloping lattice work, formed of canes, and supported by poles, the tallest of which rise about seven feet from the ground. In the north part of the island, the ancient mode of training on trees is practised. In the month of January or February, the vines are pruned, and the first dressing is given; in April or May, they are in flower; and by the

palmi, e di tre, e ardisco a dire anche di quattro, ch'è la piu bella cosa del mondo da vedere. Sonvi etiandio uve nere di pergola senza ciollo, in tutta perfettione."—*Navigat. di* Alvise da Mosto, in Ramus. Viagg. Tom. I. p. 98.

first week in September, the fruit is generally ripe. For the best white wines, it is gathered at different times, and carefully picked; the unripe and damaged portion being set apart for the manufacture of an inferior wine. The operation of treading is performed in a trough formed of strong planks, or excavated in the lava rock, and the juice thus obtained is called *vinho da flōr*. The bruised grapes are then placed within the coils of a thick rope, made of the twisted shoots of the vine, and subjected to the action of the press, which gives the second quality of must. This is usually mixed with the former, and the whole is fermented in casks, containing, for the most part, one pipe each. A few pounds of baked gypsum are thrown in, as soon as the fermentation commences; and, while it lasts, the liquor is stirred, once a day, with a large flat stick, in order to accelerate the process. On account of the mountainous nature of the country, the grapes are sometimes pressed in one place and fermented in another, to which they are conveyed on men's backs, either in goats' skins, or in small barrels. By the first or second week of November, the wine is expected to be clear.

On certain rocky grounds, which are exposed to the full influence of the sun's rays, the celebrated malmsey wine is grown. As the grapes from which it is procured require to be over-ripe, or partially shrivelled, they are allowed to hang for about a month later than those used in the manufacture of dry wines.

Another highly esteemed sort is the Sercial, obtained from a grape, which, like the *malvazia*, will only succeed on particular spots. When new, it is very harsh and austere, and requires to be kept a great length of time before it is thoroughly mellowed. It has a full body, and rich aromatic flavour quite peculiar to itself; and combines all the requisites of a perfect wine. The grape which yields it is said to have been transplanted from the banks of the Rhine; but, except in their durability, there is no analogy between the growths of the two countries. The quantity of Sercial produced does not exceed forty or fifty pipes in the year.

Most of the red grapes are consumed in the manufacture of white wines: but a portion of them are converted into *tinta*, or red wine, which, as long as it retains its colour, is sufficiently agreeable; though it generally wants the high aroma, for which the white sorts are distinguished. When old, it may be compared to tawny Port.

When Ovington visited the island, the total produce of the vineyards was reckoned at twenty thousand pipes, of which eight thousand were consumed by the natives, and three or four thousand wasted in leakage, the remainder being exported to the West Indies, and principally to Barbadoes. Captain Ury, on the other hand, estimates the amount at from twenty to thirty thousand pipes, which, he thinks, are almost all bought up by the English: but the quantity of wine exported, according to Barrow, does not exceed fifteen thousand in all, and is thus distributed:—To the East Indies, namely, five thousand five hundred pipes; to England, four thousand five hundred; to the West Indies, three thousand; and to America, two thousand[b]. One tenth of the whole produce of the vines of the island is reserved to the king; the remaining nine tenths being divided equally between the landlord and tenant. Formerly the Jesuits had the monopoly of the malmsey.

Although the wines of Madeira are naturally strong, they receive an addition of brandy, when racked from the vessels in which they have been fermented, and another portion is thrown in previously to exportation. The necessity or utility of this addition, however, appears doubtful, at least in the case of the finer sorts. That it always, for some time, disguises, and often entirely overpowers the aroma in which these wines excel, is certain: but, perhaps, it may enable them to bear much better, than they otherwise would, the high temperature to which they are often exposed, with the view of assisting the insensible fermentation; and, as they are invariably

[b] Travels to Cochin China, pp. 20—22.

mellowed by this expedient, the consumers can very well afford to sacrifice, for such an object, some portion of the natural delicacy of the wine, — especially as great part of the adventitious spirit must be dissipated in the course of the operation. The demand for Madeira wines in the American colonies, to which, at one period, they were alone exported, first led to a knowledge of the benefit they derive from removal to a warm climate; and since they have come into use among the nations of Europe, it has been usual to prepare them for particular markets, by a voyage to the East or West Indies. The cargoes which have been thus matured, necessarily sell for much higher prices than those which have been imported directly from Madeira; but it does not follow, that the wines which have made the longest voyage, and been transported to the hottest country, are always the best. Much will depend on the original quality of the wine, on the degree of fermentation which it had previously undergone, and on the quantity of brandy which had been mixed with it. Although many choice samples are returned from the East Indies, yet a large proportion of them want the full flavour of the West India Madeira, as it is called, and are more liable to acidity. This inferiority, however, is not attributable to the difference of climate, but to the circumstances under which the wine is shipped. A considerable part of the cargoes conveyed to the East Indies, with the view of being prepared for the London market, is purchased on speculation, and on long credit, or in barter for goods, and often, it may be added, by unskilful judges of wine. Hence the best growths are not always furnished, and the wine in question is sometimes contemptuously distinguished, among the merchants, by the name of *Truck*, or *Barter-Madeira*.

The great additional expense attending this mode of improving Madeira wines, has occasioned the adoption of various artificial methods, by which a similar effect may be obtained. In speaking of the Falernian wines, I had occasion to observe, that the process by which they were meliorated differed in no respect from the

expedient now occasionally resorted to, for forcing those of Madeira. In fact, it has, for many years, been the practice, among the manufacturers and dealers in the island, to subject a certain portion of the vintages to the continued influence of a high temperature, by placing them in rooms heated by stoves and flues, like the *apothecæ*, or *fumaria*, of the ancients. The wine thus treated is said to acquire, in the course of a few months, the same degree of mellowness, and the same tint, which it would take as many years to produce by the ordinary mode of keeping, or by a voyage to a hot climate: but it generally wants that delicacy of flavour, which nothing but time will give.

Few of my readers can require to be told of the extraordinary durability of the Madeira wines. Like the ancient vintages of the Surrentine hills, they are truly "*firmissima vina*,"—retaining their qualities unimpaired in both extremes of climate, suffering no decay, and constantly improving, as they advance in age. Indeed, they cannot be pronounced in condition until they have been kept eight or ten years in the wood, and afterwards allowed to mellow nearly twice that time in bottle: and, even then, they will hardly have reached the utmost perfection of which they are susceptible. When of good quality, and matured in the manner above described, they lose all their original harshness, and acquire that agreeable pungency, that bitter-sweetness, which was so highly prized in the choicest wines of antiquity,—uniting great strength and richness of flavour, with an exceedingly fragrant and diffusible aroma. The nutty taste, which is often very marked, is not communicated, as some have imagined, by means of bitter-almonds, but is inherent in the wine.

It will be readily understood, that these observations apply more particularly to the white wines; for to the red, as already stated, the same degree of permanence cannot be ascribed. But those who have formed their opinion of Madeira wine from the cargoes which have been lately imported into this country, may think that I have over-

rated its virtues, and conferred on it a distinction which it cannot fairly claim. The truth is, that Madeira, like all other wine countries, furnishes, along with a few superior growths, a great many of indifferent quality. Even on the south side of the island, two-thirds of the wines are of secondary order; and, on the north side, the greater part of the produce is of a very inferior description. In former times, England received only a small quantity of Madeira wine, and that of first-rate quality: but during the last twenty years, the increasing demand for this wine, co-operating with the impediments which the late war had opposed to our trade with Spain and Portugal, has led to the importation of a large quantity of the common sorts[c]; and these, being sold far above their value, have necessarily brought the whole into disrepute, at least among those who are not aware of the distinctions above mentioned.

Of the Canary wines, several approach to the Madeira in quality; and the produce of the island of Teneriffe, in particular, often passes under that name. It is derived from the same species of grapes, and a similar soil: but although the temperature is higher and more steady, the Teneriffe wine has never the full body and rich flavour of the best growths of Madeira. Formerly a large quantity of sweet wine was manufactured here, but latterly the increasing demand for the dry wines has induced the growers to confine their attention almost solely to this class. If, however, we may credit Glas, some of the Teneriffe wines, which, when new, are dry, have the property of turning sweet by age. That they often become more mild and less acid, as the insensible fermentation advances, may be readily conceived; but that a dry wine should ever become a sweet wine properly so called, by any length of keeping, is contrary to all established principles.

The soils of Palma are also volcanic. "The east side," as we learn from the author just named, "produces good wines of a

[c] See Appendix, No. VIII.

different taste and flavour from those of Teneriffe. The dry wine is of a thin body and yellow colour. The malvasia is not so luscious or strong as that of Teneriffe, but when it is about three years old has the flavour of a rich and ripe pine-apple; but these wines are of very difficult preservation when exported, especially to cold climates, where they often turn sour[d]." With respect to this last particular, however, GLAS's account cannot be altogether correct; for Palma sack was formerly known all over Europe, as one of the soundest and most durable sweet wines.

[d] History of the Canary Islands, p. 267.

CHAPTER IX.

OF THE WINES OF THE CAPE OF GOOD HOPE.

NTIL the settlement of the Dutch at the Cape, the culture of the vine had not been attempted in Southern Africa. If we may credit Kolben, the first plantations, owing to some mismanagement, succeeded but imperfectly; and an improbable story is told of the great advantages obtained by sowing the cuttings, like grain, in ploughed land. Assuredly, if there was any deficiency of plants, this was not the way to economize them; and such a practice, if it ever was adopted by the colonists, would only prove their ignorance and laziness. But the difficulty, whatever it may have been, was soon overcome; and vineyards multiplied rapidly in every direction.

The climate of the Cape is well known to be extremely favourable to vegetation. Resembling in temperature that of the southern parts of Europe, it affords every facility to the operations of the husbandman, and repays him with early and abundant harvests. But we have already seen, that, for the successful cultivation of the vine, excellence of climate is not the only requisite; and the nature of the soil has often a more immediate influence on the quality of the fruit. In this respect the Cape is unfortunately deficient; as few of the grounds now appropriated to vineyards exhibit the strata most congenial to the plant; and the produce is consequently almost always infected with that earthy taste which is common to wines grown in bad soils. "Volcanic soil," says Mr. Colebrooke, "is nearly unknown in Southern Africa. Calcareous gravel scarcely

exists in the older part of the colony: but an alluvial sandstone is to be found in the Isthmus of the Cape, and a shell-limestone in a few spots within the inland mountains. Compact limestone abounds in the new settled district, eastward, where vineyards are yet to be planted. Mouldering granite is frequent in the older part of the colony; and many ancient vineyards are in such ground. But in some of the lands where vines are planted, the soil is fluviatile; consisting of alluvial clay, resembling silt." The same intelligent writer thinks it probable, that the earthy taste may originate from the sub-soil, which, in many places, consists of argillaceous or sandy loam, containing alluvial clay: for he has remarked, that the wine produced on a soil deriving its clay directly from decomposed feldspar was exempt from this imperfection[a].

These observations would seem to prove, that the obstacles above alluded to are not insurmountable; that in the new settlements, at least, the vine might be introduced with every prospect of success; and that, even in the old colony, the quality both of the grapes and of the wine might be considerably ameliorated, by confining the vineyards to the more rocky lands. But the avarice of the Dutch farmers has hitherto prevented any such improvement; and though they have had before their eyes, in the vineyards of Constantia, the strongest evidence of the beneficial influence of a stony soil, yet they have never profited by the example, or taken any pains to select the fittest grounds for their plantations, but have continued to establish them wherever they were likely to procure the most abundant crops. Their system of culture, too, is exceedingly faulty. In order to obtain the greatest possible quantity of grapes, they have been in the practice of manuring their vines with fresh litter, which necessarily adds to the bad taste of the wine; and, wherever they had the command of water, they

[a] State of the Cape of Good Hope in 1822. Appendix, p. 366.

have still further impaired the quality, by excessive irrigation. This has been more particularly the case since the opening of the trade to England. In the year 1806, the total quantity of wine brought to Cape Town was 5000 *leggers*, or 6909 pipes. When the duties on the importation into this country were reduced, the amount was doubled; and, in 1817, upwards of 12,000 pipes were exported. But, as a great proportion of the wine was of a wretched quality, the market has become overstocked, and the value of the increased quantity has proved inferior to that of the smaller previous produce.

The plants with which the Cape vineyards are stocked, are said to have been brought from Persia and the banks of the Rhine; but, under the new names which have been assigned to them, it is impossible to recognise the species. That called *groene druyf* is the sort most extensively cultivated, and chiefly used in the manufacture of the wine so well known to us under the denomination of Cape Madeira. The *steen druyf*, which is less productive, gives a wine resembling Rhenish. Among the other varieties are the *lacryma Christi*, *Pontac*, *Frontignan*, and *muscadel* grapes, from which the richer wines are procured. In the year 1821, the number of vines in bearing was calculated at 22,400,000; and the total quantity of wine grown in the colony, at 21,333 pipes, which may be valued at about fifty shillings the pipe[b]. In KOLBEN's time the price was ten crowns the barrel.

The vines at the Cape are planted in rows, about three feet apart, and are kept low, not so much from regard to the quality of the produce, as on account of the injury they might otherwise sustain from the south-east wind, which often blows with extreme violence. They are grown without props, having their branches interwoven in much the same manner as the low vines in certain districts of France. In the month of August they are pruned. In

[b] State of the Cape, &c. p. 113.—See APPENDIX, No. VI.

September the ground is tilled and manured; and, in the following month, the second dressing is given. The vintage commences about the end of February or beginning of March. It is managed in a very slovenly manner. The grapes are frequently gathered before they are ripe; and in order to increase the quantity of must, the stalks and a portion of the leaves are sometimes mixed with them. They are trodden by negro slaves, and the juice is collected in vats or casks, according to the nature of the wine to be made. The barrels into which the white wines are racked, after the fermentation is completed, are strongly sulphured; but no care is taken to supply the loss from evaporation, and the wine, in consequence, often becomes irrecoverably sour. In order to check this tendency in the wines destined for exportation, a portion of brandy is commonly added. Of late years, rum has been employed for the same purpose, and is certainly preferable to the vile spirit which the colonists distil from the refuse of the grape. A regulation, of which the policy is not obvious, prohibits the introduction of the new wines into Cape Town till the month of September succeeding the vintage; the very time when the secondary fermentation may be expected to recommence with greatest vigour. In what manner such a restriction can benefit the health of the inhabitants, which the framers of the law are said to have had in view, I am wholly unable to conjecture. It may, indeed, prevent the mixture of the new wine with old, but it affords no security against other adulterations of a more pernicious nature.

Such being the usual mode of treating the vintage at the Cape, it is no wonder that so large a proportion of the wines should prove execrable. The only exceptions that deserve to be noticed are the growths of Great and Little Constantia, two contiguous farms situated at the eastern base of the Table Mountain, between eight and nine miles from Cape Town; the former producing the red sweet wine, which takes the name of Constantia,—the latter, the white sort, and also a wine called Cape Hock. As has been

already hinted, the soil here is of a better quality than in most of the adjacent vineyards; consisting chiefly of decomposed sandstone. The vintage, too, is conducted with greater care; the grapes being picked, and freed from the stalks and other impurities, before they are pressed. As the whole quantity of sweet wine annually made in the two vineyards does not exceed eighty-five pipes, the price is necessarily high. Formerly the Dutch East India Company had the monopoly of the sale, which they relinquished on condition of receiving sixty half ohms (or nineteen hogsheads) from each farm, at the fixed price of twenty-five rix-dollars the half ohm. Some years ago, the half ohm could not be purchased at the Cape for less than two hundred rix-dollars: but latterly it has fallen to one hundred and fifty rix-dollars; and the formation of an extensive vineyard on the contiguous farm of Witteboom, which is expected to furnish a wine of equal goodness with that of Constantia, will probably soon occasion a further reduction of the price.

Although the vintages of Constantia are exempt from any disagreeable taste, and are deservedly esteemed for their surpassing richness; yet, in point of flavour and aroma, they yield to the muscadine wines of Languedoc and Roussillon, and the malmsies of Paxarete and Malaga. It is chiefly, therefore, owing to their rarity and extreme costliness, that they have acquired such celebrity. Some inferior muscadel wines are occasionally introduced into the market under their name.

CHAPTER X.

OF THE WINES OF PERSIA.

PERSIA is supposed to be the native country of the vine; and this opinion seems to receive confirmation from the extraordinary perfection to which its fruit there attains. "Grapes," says OLIVIER, in his description of the country round Ispahan, "everywhere abound, and their quality is excellent. None of those which I had tasted at Constantinople, in the islands of the Archipelago, in Crete or Cyprus, in Syria, in Provence, or in Italy, appeared to me comparable to the *kismish* grape, of which the berry is white, of an oval shape, and middling size, having a very delicate skin, and no seeds[a]." At Shiraz, they are described as growing "to a size and fulness hardly to be matched in other climates[b]." But, according to MR. MORIER, even the grapes of Shiraz are surpassed in quality by those of Casvin. "That city," he observes, "is environed by vineyards and orchards to a considerable extent, the former of which yield a grape celebrated throughout Persia for the good wine it produces. The vine-dressers water their vines once in the year, which is twenty days after the festival of the No Kooz, about the 10th of April; and the vizier told us, that the soil, which is clayey, is so good, that the moisture it imbibes suffices until the next irrigation[c]."

[a] Voyage dans l'Empire Othoman, Tom. III. p. 108.

[b] Travels in Georgia and Persia, by Sir R. KERR PORTER, Vol. I. p. 706.

[c] Second Journey through Persia, p. 203.

The Mahomedan religion, prohibiting the use of wine to its followers, tends to restrict the manufacture to those places where the Jews, Armenians, or Hindoos, form part of the population. But the Persians have always been less scrupulous observers of this precept of the Koran, than the other Mussulmans; and several of their kings, unable to resist the temptation, or conceiving themselves above the law, have set an example of drunkenness, which has been very generally followed by their subjects. Shah Abbas II., as we learn from Chardin and Tavernier, was much addicted to wine, and made his courtiers share in his cups. His cellars were abundantly stocked with the choicest vintages of Georgia, Karamania, and Shiraz, preserved with great nicety in bottles of Venice crystal; and, every six weeks, he received from the first of these countries a supply of twenty chests, each of them containing ten bottles, and each bottle about three quarts. He had also, at different times, wines sent him from Spain, Germany, and France; but he drank only those of Persia, thinking them preferable to all others. A particular officer was appointed to superintend his wines, and to watch the proceedings of all those who made or sold that commodity; no one being permitted to engage in the trade without an express license, which was only to be obtained by dint of bribery[d]. At present many Persians indulge secretly in wine, and generally to intemperance; as they can imagine no pleasure in its use, unless it produce the full delirium of intoxication. They flatter themselves, however, that they diminish the sin, by drinking only such as is made by infidels: for "so great is the horror of a Mahomedan vintage," as a late traveller informs us, "that, wherever jars of the wine of Shiraz are discovered, the chief officers of the town are ordered to see them broken to pieces. But all this strictness relates to the Persians alone[e]." The Jews and Armenians prepare

[d] Voyages en Perse, Tom. III. pp. 26, 249.

[e] Travels in Georgia and Persia, by Sir R. Kerr Porter, Vol. I. p. 348.

wine on purpose for the Mahomedans, by adding lime, hemp, and other ingredients, to increase its pungency and strength; for the wine that soonest intoxicates is accounted the best, and the lighter and more delicate kinds are held in no estimation among the adherents of the prophet[f].

It is chiefly along the line of mountains that stretch from the Persian Gulf to the Caspian Sea, that the best wine districts are situated. Besides the vintages of Shiraz, those of Yezd, Ispahan, &c., are mentioned with commendation by CHARDIN; and recent travellers add to the list the growths of Teheran, Tabriz, and Casvin. But few of these wines, except the Shiraz, are much known out of the country where they are produced; and even the last-mentioned no longer maintains the high celebrity which it formerly enjoyed. TAVERNIER estimated the quantity annually made at four thousand one hundred and twenty-five tuns, of which a considerable portion was shipped for the East Indies; but both the manufacture and trade in the commodity have declined since the wines of Madeira came into general use in our Asiatic colonies.

The principal vineyards in the environs of Shiraz are situated at the foot of the mountains to the north-west of the town, where the soil is rocky, and the exposure extremely favourable. The vines are all kept low, but occasionally supported by stakes. Among the species cultivated, one of the most esteemed is the *kismish;* the fruit of which, having an agreeable acidulous taste, is in great request for the table, as well as for the manufacture of wine, and, when dried, forms an excellent substitute for currants. Next to it comes the *anguur asjì*, a black, or dark purple grape, more fleshy than the other, and yielding an excellent red wine, of a deep red colour,

[f] "Les gens de cour, les cavaliers, et les debauchés, beuvent du vin; et comme ils le prennent tous comme un remède contre l'ennui, et que les uns veulent qu'il les assoupissent, et les autres qu'il les échauffe, et les mette en belle humeur, il leur faut du plus fort et violent; et s'ils ne se sentent pas bientôt yvres, ils disent—'Quel vin est cela? il ne cause pas de joye.'"—*Voyages de* CHARDIN, Tom. II. p. 67.

and somewhat astringent taste, which KÆMPFER compares to Hermitage: but the quantity made is small. For the more common wines, or those which most frequently come into the market, five different kinds of grapes are used, of which four are white or brown, and the fifth, called *Samarcandì*, from the town of that name, has a black skin with red juice, and furnishes a claret wine. At Ispahan a muscadel grape is grown, which yields a copious supply of must.

When the grapes are gathered, they are brought to the cellar, and introduced into a vat or cistern, formed of masonry, and lined with plaster, about eight feet in length and breadth, and four in depth, where they are trodden; and the juice that flows from them is collected in a trough at the bottom, from which it is immediately removed into large earthen jars, to undergo the requisite fermentation. These jars, which contain from sixty to eighty gallons, and are either varnished in the inside, or rendered impervious by a coating of grease, are carefully covered, and left undisturbed for a couple of days. When the fermentation has fairly commenced, the murk is stirred by one of the workmen with his arms bare; and this operation is repeated for eighteen or twenty successive days. The wine is then strained, through coarse sieves, into clean vessels, which are filled to the brim, and covered with light matting. In these it is allowed to remain for thirty or forty days; and when the secondary fermentation is thought to be completed, it is racked into smaller jars or bottles, in which it can be conveniently transported. That which is destined for exportation is strained a second time. The larger bottles, called *karaba*, are covered with wicker work, and hold eight or nine gallons,—the smaller, six or seven quarts. They are packed in chests, which generally contain ten small bottles, or two *karabas*, and one small bottle between[g]. The bottles are stopped with cotton, soaked in wax or pitch.

[g] KÆMPFER, Amœnitates Exoticæ, pp. 374—8. I have given the size of the Shiraz bottles as stated by KÆMPFER, but those which I have seen were of considerably less capacity.

Chardin found the Shiraz wine of excellent quality; and, though inferior in delicacy to the vintages of his own country, and at first somewhat rough to the taste, yet, after drinking it for a few days, he relished it so much, as to give it the preference to all other wines. He admits, however, that it does not keep well, being liable to ropiness after the second year; and that, when drunk freely, it is apt to cause headach. Kæmpfer extols it more highly, placing it, in point of flavour and aroma, on a level with the best growths of Champagne and Burgundy, and contradicting the assertion, that it incommodes the head[h]. Since these travellers wrote, and since Hafiz sung the praises of the ruby wine of Shiraz, the declining demand, and the difficulties opposed to the manufacture, have probably tended to impair the quality; for we are told, that, at the present day, "the culture of the vine itself is comparatively neglected (at Shiraz); the sorting of the fruit a delicacy seldom attended to; and the apparatus used in the compression, fermentation, &c. of the juice, is on so confined a scale, that only small quantities of the esteemed flavour are obtained. Indeed, no wine, under one name, possesses such variety of quality; every gradation, from a liquid clear as the most brilliant topaz, to a sour and muddy syrup. When good, the taste should be a little sweet, accompanied with the flavour of dry Madeira, to which, when old, it is not at all inferior[i]."

This description of the colour and flavour of the Shiraz wine, however, applies only to the white sort, which, even when of firm and generous quality, scarcely deserves to be ranked on a par with the best growths of Madeira. Some samples of it betray a slight

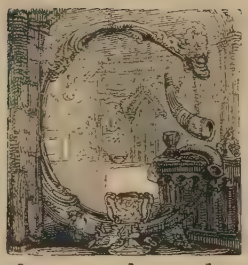
[h] "Virtute pollet eximia: modico enim usu mentem mire exhilarat, et appetitum acuit; nimio et ad ebrietatem adsumptum, spiritus vehementer accendit, et prope ad furorem turbat; post crapulam tum nullum relinquit, vel capiti gravitatem, vel membris lassitudinem, vel stomacho fastidium cibi."—Amœnit. Exotic. p. 379.

[i] Travels in Georgia and Persia, Vol. I. p. 707.

taste of saffron, which is not unfrequently added by the Armenian manufacturers to their wines, in order to please the eye as well as palate of their customers. The other kind, which is probably the bright-red wine described by CHARDIN, resembles tent, or the second-rate sweet wines of the Cape, and occasionally tastes a little of the pitch used for stopping the bottles in which it is exported. It is not so durable as the white.

CHAPTER XI.

OF THE WINES USED IN ENGLAND.



ONCERNING the introduction of the vine into England, we possess no satisfactory information. That it was unknown in the earliest periods of our history, is abundantly certain; for neither Cæsar nor Pliny notice it in their descriptions of the country, and Tacitus expressly excepts it from the usual productions of the soil[a]. Camden and others, relying on the evidence of the doubtful passage of Vopiscus, formerly quoted, think that the earliest vineyards may have been formed towards the end of the third century: but, as Mr. Daines Barrington has justly objected, the permission to plant the vine, supposed to have been granted by Probus, could have been of little service, if the vine would not grow in Britain; and, besides, there is reason to believe, that the name 'Britannis,' in the passage alluded to, was meant to designate the inhabitants of part of Belgic Gaul, rather than the ancient Britons[b]. As, in those times, the fruit of the vine did not ripen thoroughly beyond the Cevennes, it could still less be expected to arrive at maturity in the climate of this country, which must have been even more moist and variable than it is at present: and Camden himself is obliged to acknowledge, that, in general, it

[a] "Solum, præter oleam vitemque, et cetera calidioribus terris oriri sueta, patiens frugum, fecundum: tarde mitescunt, cito proveniunt; eademque rei causa, multus humor terrarum cœlique."—Jul. Agricol. Vita, c. xii.

[b] Plin. Hist. Nat. iv. 17.—Archæologia, Vol. III. p. 67.

was cultivated more for shade and ornament, than for use[c]. In proportion, however, as the improvements of agriculture extended, we may conceive, that the foreign settlers in the island, desirous of enjoying those luxuries to which they had been accustomed in their own countries, might attempt the culture of the vine. In some favoured situations their labours were probably attended with a certain degree of success: and as long as they had not the means of obtaining better liquors from abroad, they would be content with such indifferent wine as their own lands afforded them.

Ale and mead were served at the feasts of our Saxon ancestors; and wine was only an occasional luxury. In the Saxon colloquy, cited by Mr. Turner, the youth who is asked what he drank, replies, "Ale, if I have it; or water, if I have it not." On being questioned, why he does not drink wine, he says, "I am not so rich, that I can buy me wine, and wine is not the drink of children, but of the elders and the wise[d]." It appears, however, from the testimony of Bede, that, so early as the commencement of the eighth century, the culture of the vine had made some progress in Britain; for he observes, that the country then exhibited vineyards on a few spots — "vineas quibusdam in locis germinans[e]." They are mentioned in the laws of Alfred[f], and other early documents; and Edgar makes a gift of a vineyard at Wycet, with the vine-dressers. In a Saxon Calendar, preserved in the British Museum, and copied by Strutt[g], there is a series of rude drawings, representing the different operations of the year. That prefixed to the month of February shows certain men in the

[c] "Propé has *The Vine* visitur, Baronum de Sandes mansio nitidissima, a vitibus denominata, quas in Britannia ex Probi Imperatoris tempore umbraculi magis quam fructus gratiâ habuimus."—Camden, Britannia. Lond. 1590, p. 199.

[d] History of the Manners, &c. of the Anglo-Saxons, p. 68.

[e] Hist. Eccles. Gentis Angl. i. 1.

[f] "Si quis damnum intulerit alterius vineæ vel agro, vel alicui ejus terræ, compenset sicut ejus illud æstimet."—Cap. xxvi.

[g] Horda Angl. Vol. I. pl. x.

act of pruning trees, of which some resemble vines. But, supposing them to have been meant for such, it is evident, from the succeeding drawings, that the vintage could have formed no important part of the labours of the husbandman; for the occupations allotted to September and October consist in boar-hunting and hawking. At the time of the Norman conquest, several new plantations of vines seem to have been made; and among other places, in the village of Westminster,—at Chenetone, in Middlesex,—at Ware, in Hertfordshire,—and at Hanten, in Worcestershire. They are generally measured by arpents (*arpenni*). In Domesday Book, under the head of Rageneia, among the lands of Suein, in Essex, is one remarkable entry respecting an inclosure of six arpents, which, in good seasons, yielded twenty *modii* of wine[h]. Even Holeburne had its vineyard, which afterwards came into the possession of the bishops of Ely; and, when the buildings of the city extended in that direction, gave the name to a street which still exists[i].

To all the greater abbeys, at least in the southern part of the kingdom, vineyards appear to have been attached. As these establishments were generally placed in fertile and well-sheltered valleys, the choicest exposures for the vine might be found in their neighbourhood; and many of the monks being foreigners, would naturally be familiar with the best modes of culture, and the means of overcoming the disadvantages of the climate. According to Somner, Canterbury church and St. Augustine's abbey were possessed of numerous vineyards; among which those at Colton, St. Martin's, Chertham, Brook, and Hollingburn, are particularly named[k]. At Halling, near Roches-

[h] "M°. 1 parcus 7 vi arpenni vineæ 7 reddit xx modios vini si bene procedit."—Domesday Book, Tom. II. fol. 43. b.—See also 'Introduction to Domesday Book,' p. xxxvi. What the capacity of the *modius* here mentioned may have been, I am unable to determine. If the Paris *muid* be meant, it was larger than our hogshead.

[i] "Witts redd. vice comiti regis per annum vi sol. p. terra ubi sedet vinea sua."—Ibid. Tom. I. fol. 127.—Bentham, Hist. Ely, p. 157.

[k] Antiq. Canter. p. 145.

ter, the bishop of that see is stated by LAMBARDE to have had a vineyard, and to have made wine, of which a present was sent to EDWARD II., when he was at Bockingfield: and the same author informs us, that, about the time of the Norman conquest, there was great store of vines at Santlac, near Battle, in Sussex, probably belonging to the abbey of that name[l]. In the register of Spalding Priory, we read of JOHN the almoner, that he "bought lands, laid out a garden, and planted a vineyard and orchards[m]." But the most decisive evidence of all is furnished by the archives of the church of Ely, where we have an account of the produce of a vineyard for two or three years; and are told, that in one unfavourable season no wine, but verjuice, was made[n]. The rolls of the Exchequer, too, contain a discharge of the sheriffs of Northampton and Leicester, in the fifth year of King STEPHEN, for certain expenses incurred on account of the royal vineyard at Rockingham[o]; and in some of the ecclesiastical records, notice is taken of tithes received for wine.

Towards the middle of the twelfth century, if we may credit WILLIAM of Malmesbury, vineyards were no longer confined to a

[l] Topographical Dictionary of England, by W. LAMBARDE, p. 350.

[m] "Non est silendum qualiter se gessit in officio Elemosinarii. Permissione Prioris emit terras, ædificavit domos et capellam, fecit ortum, plantavit vineam et pomaria."—MS. COLE, vol. xliii. p. 93.

[n] "Exitus vineti £2 15 3½
Ditto vineæ 10 12 2½
10 bushels of grapes from the vineyard . . 0 7 6
7 dolia musti, from the vineyard, 12th EDWARD II. 15 1 0
Wine sold for 1 12 0
Verjuice 1 7 0
For wine out of this vineyard . . . 1 2 2
For verjuice from thence 0 16 0
No wine but verjuice made, 9th EDWARD IV."
SPEECHLY's Treatise on the Culture of the Vine, 2d Edit. p. 270.

[o] MADOX's History of the Exchequer, chap. x. p. 247.

few spots, as in the time of Bede, but extended over large tracts of country; producing abundance of excellent wine. "You may behold," he observes, when describing the fertility of the Vale of Glocester, "the paths and public roads fenced with apple trees, which are not planted by the hand of man, but grow spontaneously; and such is the exuberance of the soil, that it teems with the fairest fruits, which are of excellent flavour, and so durable a nature, that many of them will keep a whole year. This district, too, exhibits a greater number of vineyards than any other county in England; yielding abundant crops, and of superior quality. Nor are the wines made here by any means harsh and ungrateful to the palate; for, in point of sweetness, they may almost bear comparison with the growths of France[p]." Though this description of the Glocestershire fruits and wines may appear highly coloured, yet it is clear and consistent, and discovers, in my opinion, nothing to justify the interpretation put upon it by Mr. Daines Barrington; who endeavours to make out, that the words *vineæ* and *vina*, in the original, signify properly, not vineyards and vines, but orchards and cider[q]. There is no evidence, that these words were, at any period, used in that sense by the monkish writers; and, in the passage under consideration, a marked distinction is made between the two kinds of produce. In Domesday Book, and other ancient records, the term *pomerium* occurs, which sufficiently shows, that the names were not confounded in the manner alleged; and if any other proof of the true meaning of the expressions were required, it is abundantly supplied by a subsequent passage in the work just quoted, where

[p] "Cernas tramites publicos vestitos pomiferis arboribus non insitiva manus industria, sed ipsius solius humi natura. Ipsa se terra sponte subrigit in fructus, eosque sapore et specie cæteris plurimum præstantes. Quorum pluros ante annum marcescere nesciunt, ut omnes usque ad novos successores præstent officium. Regio plusquam aliæ Angliæ provinciæ *vinearum* frequentia densior, proventu uberior, sapore jucundior. *Vina* etiam ipsa bibentium ora tristi non torquent acredine, quippe quæ parum debeant [cedant] Gallicis dulcedine."—De Gestis Pontific. Anglic. apud Scriptores post Bedam. p. 283.

[q] Archæologia, Vol. III. p. 77.

the author not only specifies apple-trees and vines as different plants, but describes the manner in which the latter grew. Comparing the domain of Thorney, in the Isle of Ely, to an earthly paradise, he says, "It is so fully cultivated, that no portion of the soil is left unoccupied. On the one hand, it may be seen thickly studded with apple-trees; on the other, covered with vines, which either trail along the ground, or are trained on high, and supported on poles[r]. Were all other testimony wanting as to the culture of the vine in those early times, this alone would be decisive of the question.

These accumulated proofs, however, strong as they undoubtedly are, by no means warrant the assertion of Dr. Plott, "that the Britons planted vineyards and made wines anciently over all the kingdom[s];" by which he probably meant to insinuate, that this country was chiefly supplied with wine of its own growth. In the time of Bede, it is clear that vineyards were few in number; in Domesday Book mention is made of them about eight and thirty times; and most of those which were planted after the Conquest either belonged to the monasteries, or were cultivated by wealthy individuals, for amusement rather than profit. But foreign wine was already in general use; and as it could be had of much better quality, and probably at less expense, than what was produced in the island, it is not likely that the supply of the latter was ever sufficient for the consumption of the country. We find, it is true, that the monks of Ely were in the practice of occasionally selling part of the wine and verjuice which they made; and we are told by Stowe, that, among the archives of the Court of Pleas of the Forest and Honours at Windsor, "is to be seen the yearly account of the charges of the planting of the vines, that in the time of King

[r] "Nulla ibi vel exigua terræ portio vacat. Hic in pomiferis terra se subrigit; hic prætexitur ager vineis, quæ vel per terram repunt, vel per bajulos palos in celsum surgunt." —De Gestis, &c. p. 294.

[s] Natural History of Staffordshire, p. 380.

Richard II. grew in great plenty within the little Park, as also the making of the wine itself, whereof some part was spent in the king's house, and some part sold to his profit, the tithes whereof were paid to the abbot of Waltham, then parson both of the New and Old Windlesore[t]." It was probably, however, only the refuse of the vintages which thus came into the market, and that in no great plenty. It will shortly appear, that, at the period last mentioned, foreign wines were imported annually to a large amount. As they came into general use, most of the vineyards were naturally suffered to fall into decay.

In more recent times, several attempts have been made to revive this species of culture, and to manufacture wines from English grapes. Thus Philipott assures us, that at Godington, in Kent, one Captain Toke "hath so industriously and elegantly cultivated our English vines, that the wine pressed and extracted out of their grapes seems not only to parallel, but almost to outrival that of France[u]:" and, for some years, the Duke of Norfolk made a considerable quantity of wine from a vineyard at Arundel Castle, which, according to the report of a writer in the Museum Rusticum, excelled much of the Burgundy imported into this country, though he admits it was not "of quite so fine a flavour as the wines of Beaune[x]." Between thirty and forty years ago, Sir Richard Worsley, in order to give the experiment every chance of success, procured some of the most hardy species of vines, planted them in a rocky soil, with a south-eastern exposure, at St. Laurence, in the Isle of Wight, and engaged a vine-dresser from France to superintend their culture. The result was, that, in one or two favourable years, a tolerable crop of grapes was obtained: but eventually the cold springs and early autumns weakened the plants, and blighted the produce, and the scheme was soon entirely aban-

[t] Chronicle, p. 143.
[u] Villare Cantianum, p. 112.
[x] Museum Rusticum, Vol. I. p. 85.

doned. It must, however, be acknowledged, that, notwithstanding the general mildness of the climate of the Isle of Wight, the spot chosen by Sir Richard was not the best adapted for a vineyard; for it is close upon the sea, and consequently much exposed to the cold winds which prevail in the Channel, especially at the time when the vine begins to bud. The endeavours of Mr. Hamilton, at Painshill, were rather more fortunate in the issue. As the account he has given of his operations shows not only the difficulties with which he had to contend, but also the manner in which he succeeded in conquering them, it may serve as a record of what can be accomplished in this way, by those who can afford the expense, and have sufficient perseverance to perfect the experiment.

"The vineyard at Painshill," he observes, in a communication to Sir E. Barry, "is situated on the south side of a gentle hill, the soil a gravelly sand. It is planted entirely with the two sorts of Burgundy grapes; the *auvernat*, which is the most delicate, but the tenderest; and the miller grape, commonly called the *black cluster*, which is more hardy. The first year, I attempted to make red wine, in the usual way, by treading the grapes, then letting them ferment in a vat, till all the husks and impurities formed a thick crust at the top, the boiling ceased, and the clear wine was drawn off from the bottom.

"This essay did not answer: the wine was so very harsh and austere, that I despaired of ever making red wine fit to drink; but through that harshness I perceived a flavour something like that of some small French white wines, which made me hope I should succeed better with white wine. That experiment succeeded far beyond my most sanguine expectations; for the very first year I made white wine, it nearly resembled the flavour of Champagne; and in two or three years more, as the vines grew stronger, to my great amazement, my wine had a finer flavour than the best Champagne I ever tasted; the first running was as clear as spirits, the second running was *œil de perdrix*, and both of them sparkled and

creamed in the glass like Champagne. It would be endless to mention how many good judges of wine were deceived by my wine, and thought it superior to any Champagne they ever drank; even the Duke de Mirepoix preferred it to any other wine; but such is the prejudice of most people against any thing of English growth, I generally found it most prudent not to declare where it grew, till after they had passed their verdict upon it. The surest proof I can give of its excellence is, that I have sold it to wine-merchants for fifty guineas a hogshead; and one wine-merchant, to whom I sold five hundred pounds' worth at one time, assured me, he sold some of the best of it from 7*s.* 6*d.* to 10*s.* 6*d.* per bottle.

"After many years' experience, the best method I found of making and managing it was this:—I let the grapes hang, till they had got all the maturity the season would give them; then they were carefully cut off with scissars, and brought home to the wine-barn in small quantities, to prevent their heating, or pressing one another; then they were all picked off the stalks, and all the mouldy, or green ones, were discarded, before they were put upon the press, where they were all pressed in a few hours after they were gathered; much would run from them, before the press squeezed them, from their own weight upon one another. This running was as clear as water, and sweet as syrup, and all this of the first pressing, and part of the second, continued white; the other pressings grew reddish, and were not mixed with the best. As fast as the wine ran from the press into a large receiver, it was put into the hogsheads, and closely bunged up. In a few hours one could hear the fermentation begin, which would soon burst the casks, if not guarded against, by hooping them strongly with iron, and securing them in strong wooden frames, and the heads with wedges; in the height of the fermentation, I have frequently seen the wine oozing through the pores of the staves.

"These hogsheads were left all the depth of winter in the cool barn, to reap the benefit of the frosts. When the fermentation was

over, which was easily discovered by the cessation of noise and oozing; but to be more certain, by pegging the cask, when it would be quite clear; then it was racked off into clean hogsheads, and carried to the vaults, before any warmth of weather could raise a second fermentation. In March, the hogsheads were examined; if any were not quite fine, they were fined down with common fish glue, in the usual manner; those that were fine of themselves were not fined down, and all were bottled about the end of March; and in about six weeks more would be in perfect order for drinking, and would be in their prime for above one year; but the second year the flavour and sweetness would abate, and would gradually decline, till at last it lost all flavour and sweetness; and some that I kept sixteen years became so like old Hock, that it might pass for such to one who was not a perfect connoisseur. The only art I ever used to it, was putting three pounds of white sugar-candy to some of the hogsheads, when the wine was first tunned from the press, in order to conform to a rage that prevailed, to drink none but very sweet Champagne.

"I am convinced much good wine might be made in many parts of the south of England. Many parts are south of Painshill, many soils may be yet fitter for it, and many situations must be so; for mine was much exposed to the south-west wind (the worst of all for vines), and the declivity was rather too steep; yet with these disadvantages it succeeded many years. Indeed, the uncertainty of our climate is against it, and many fine crops have been spoiled by May frosts and wet summers; but one good year balances many disappointments[y]."

After such decided testimony in favour of the wines procured, in former times, from English grapes, it may appear unreasonable to impugn their general character. That by diligent attention, and skilful management, some very tolerable imitations of the inferior

[y] Observations on the Wines of the Ancients, &c. pp. 271—6.

sorts of foreign wine may not have been effected, I am far from affirming: but I imagine that the description that EVELYN gives of a sample of these wines, which fell under his cognizance, will apply to most of them. "I went," he observes in his Diary, under the date 26th September, 1655, "to see Colonel BLOUNT's subterranean warren, and drank of the wine of his vineyard, which was good for little." Certainly, as long as foreign wines can be obtained at moderate prices, little advantage will accrue from the attempt to supplant the use of them by the produce of English grapes; as of all crops, that of the vine is the most precarious; and, even in some of the provinces of France, does little more than repay the expense of cultivation. It is only in the case of those vineyards which yield the choicest growths, and where the proprietors are possessed of sufficient capital to enable them to keep their wines, till they acquire that excellence which age and judicious treatment alone can give, that this branch of culture yields a large profit. Wine countries, it is true, support a numerous population; but the poverty and misery of the peasantry in them are proverbial. If the grape will not always ripen in Champagne, it would be absurd to expect it should do so in a climate so inconstant as that of England; and to think of converting any portion of our corn lands into vineyards, would be the height of folly. In Normandy and Picardy, where the heat of the summer is greater than in England, we have seen, that the culture of the vine has been gradually relinquished; and all the more recent attempts to establish vineyards in this country, though they appeared to succeed for a time, have ultimately failed. It is, therefore, easy to predict the fate of a recent proposal for establishing a society in Ireland, in order to encourage the cultivation of the vine in that island. The soil there, indeed, is excellent, and abounds, in particular, with a limestone gravel, which would admirably suit that species of culture; but the low temperature of the climate, which is even less than that of England, and, especially, its extreme moisture, would present insuperable obstacles to the success of such a scheme.

Before quitting the subject, it may be observed, that grapes ripened on walls and treillises are, in general, unfit for the manufacture of wine[z]. In this country, however, it is with such grapes that the experiments in wine-making are now usually undertaken; which may probably be one cause why the liquors obtained have neither much durability nor flavour. Those persons who may be desirous to learn the most approved methods of correcting these defects, will find ample information on the subject in Dr. Macculloch's excellent work[a].

The union which subsisted between England and the northern provinces of France after the Norman conquest, but, above all, the acquisition of the Dutchy of Guienne in 1152, naturally led to an interchange of commodities between the two countries. Accordingly we find, that, in two years from the last-mentioned date, the trade in wines with Bordeaux had commenced: and, among our older statutes, are numerous ordinances relating to the importation of French wines, most of which, in conformity to the mistaken notions of political economy in those times, fix the *maximum* of price for which they were to be sold. Thus, in the first year of King John, it was enacted, that the wines of Anjou should not be sold for more than twenty-four shillings a tun; and that the wines of Poitou should not be higher than twenty shillings; while the other wines of France were limited to twenty-five shillings a tun, "unless they were so good as to induce any one to give for them two marks, or more[b]." This appears to be the earliest statute on the subject of the foreign wine trade. With regard to the wines

[z] "En France même, jamais le raisin de treille, à quelque maturité qu'il parvienne, quelque flatteur qu'il soit au goût, ne produit une liqueur parfaitement vineuse." — Traité sur la Culture de la Vigne, Tom. I. p. 13.

[a] Remarks on the Art of making Wine. London, 1816.

[b] "Johannes rex statuit, quod nullum tonellum vini Pictavensis vendatur carius quam xx solidis, et nullum tonellum vini Andegavensis carius quam xxiv solidis, et nullum tonellum vini Franciæ carius quam pro xxv solidis, nisi vinum illud adeo bonum sit, quod aliquis velit pro eo dare circa duas marcas et altius." — Annal. Monaster. Burton. p. 257.

specified, it would appear, from PAULMIER's account, that those of Anjou, which were embarked at Nantes, and probably included the produce of Touraine, were chiefly white, and distinguished by their strength and sweetness[c]; while the growths of Poitou, otherwise called Rochelle wines, from the port where they were shipped, were of the light red class. In the retail trade, the latter were directed to be sold at fourpence the gallon,—the former at sixpence. But, according to HARRISON, "this ordinance did not last long; for the merchants could not bear it; and so they fell to and sold white wine for eightpence the gallon, and red and claret for sixpence[d]." Both Anjou and Poitou belonged at that time to England.

We learn from the rolls of the Exchequer, that foreign wine was already liable to certain duties on its entry into the kingdom. By a deed of the 3d JOH. a gift of a hundred *muids* of wine, from the king of France to the monks of Christ Church, at Canterbury, was confirmed; and the wine was "exempted from modiation and all other custom belonging to the king[e]." Out of every cargo of wine imported, the king claimed one tun before the mast, and another behind the mast, under the name of *prisa*, or *recta prisa;* and officers were appointed at the different ports, to collect and account for the same. In the fourteenth year of the same reign, there is an entry of the sum of five hundred and seven pounds eleven shillings, on account of these prize wines, and others which were bought for the king's use, viz. for five prize tuns of Anjou wine, and three that were purchased; for forty-five prize tuns of Gascon wine, and two hundred and twenty-two purchased; for two prize tuns of Auxerre wine, and fourteen purchased; for thirty-one prize tuns of French wine, and twenty-three purchased; and for three prize tuns of wine of Saxony[f]; being in all three hundred and forty-eight

[c] Vie Privée des François, Tom. III. p. 14.
[d] HOLLINSHED's Chronicles, Vol. III. p. 161.
[e] MADOX's History of the Exchequer, p. 526. [f] Ibid. p. 527.

tuns: so that the average price was somewhat less than thirty shillings a tun. This document may give an idea of the principal wines then consumed in England; and we may see by it, that the wines of Gascony exceeded in quantity twice the amount of all the other wines. The Auxerre wine, perhaps the produce of the episcopal vineyards formerly noticed, is distinguished from that of France, because it came from the territory of the Duke of Burgundy. What other wines were furnished under the name of French, it is not easy to conjecture, unless they were the growths of Languedoc and Provence. The 'wine of Saxony' might be either a misnomer for Rhenish wine, or it might mean the produce of some of those vineyards established in the north of Germany, which, during the middle ages, supplied several of the neighbouring states with common wines[g]. That it was of inferior quality, seems proved by the fact, that no additional quantity of it was purchased.

During the following reign, the importations would appear to have increased; for most of the chroniclers ascribe the neglect of the English vineyards to that fondness for French wines which then came upon us[h]. But by this time the crusades had probably also introduced a taste for the sweet wines of Italy and Greece, which are occasionally mentioned by our early poets, and which, at a subsequent period, were certainly well known in this country. In an account rendered to the Exchequer by the Chamberlain of London, in the thirtieth year of HENRY III., we find that officer was allowed 404*l.* in acquittance of 404 *dolia* of French, Gascon, and Anjevin wines, imported at London and Sandwich;—39*l.* and half a mark, for 22 dolia of wine of St. John and the Moselle (*de vino*

[g] MEINERS, Historische Vergleichung des Mittelalters. 2ter. B. s. 103.

[h] "Verum hæ (vineæ) et quotquot in Anglia fuerant, ad vinum comparatæ, temporum vicissitudine et incolarum socordia deficere, maxime Henrici Tertii, Johannis filii, temporibus cœpere, cum gliscentibus domesticis et externis bellis, nostrates Gallicum vinum et sanguinem ardentius sitirent."—Comment. de Rebus Albion. Auctore JOH. TWYNE, p. 116.

S. Johannis et de Oblinquo[i]);—30*l.* for 20 dolia of new, or perhaps sweet, French wine (*musti Gallici*);—and 1846*l.* 16*d.* for 900 $\frac{20}{4}$ 19 dolia of wines of Gascony, Anjou, French wine, Moselle wine, and wine of St. John, which were bought[k]. The last-mentioned may have been an Italian sweet wine, or else the wine of St. Jean d'Angely, which is celebrated in the 'Bataille des Vins' on account of its extraordinary strength[l].

Before the decease of HENRY III., a new custom of one penny for every tun, under the name of *gauge*, was levied on all wines imported. From Michaelmas, 1272, to Martinmas, 1273, the sum collected from this duty, at the ports of London, Southampton, Portsmouth, and Sandwich, was 36*l.* 17*s.* 2*d.*, which makes the number of tuns imported amount to eight thousand eight hundred and forty-six, besides those taken by the king under the name of prize, which were not subject to the gauge. In the year 1299, the number of vessels above nineteen tons, bringing cargoes of wine, was seventy-three; in the following year, seventy-one: the prize wines for the two years consequently amounted to two hundred and eighty-eight tuns. A charter, which bears the date of August 13, 1302, exempts the wine-merchants of Aquitaine from this impost.

From this period the English depended chiefly upon Gascony for the supply of clarets and other light wines: and during the long reign of EDWARD III., various laws were passed for the regulation of the trade with that province, which appears to have become of considerable consequence, although it was hampered by some of the most

[i] I have ventured to call this 'Moselle wine,' as *Obringa*, or *Obrincus*, which might be easily corrupted to 'Oblinquus,' was an ancient name for the Moselle. On what grounds MR. MADOX supposes it to have been Rhenish, I am at a loss to discover.

[k] MADOX's History of the Exchequer, p. 527.

[l] "Li vins S. Jehan d'Angeli
Si dist à Henri d'Andeli
Qu'il li avoit crevé les ex
Par sa force, tant estoit prex."

arbitrary enactments that ever disgraced our Statute-book. By the 27th of EDWARD III., st. 1, c. 7, for instance, it was decreed, "that no English merchant, nor any of his servants, nor others for them, shall go into Gascony, there to abide, nor shall he have any other there dwelling to make bargain or buying of wines, by any colour, before the time of vintage, that is to say, before that common passage be made to seek wines there; and that none buy or bargain by himself, or by any other, any wines, but only in the ports of Bordeaux and Bayonne; and if any be found doing against the same, he shall be apprehended by the seneschal of Gascony, or the constable of Bordeaux, and his body brought to the Tower of London[m]." The rigour of this enactment, indeed, was somewhat relaxed by the 38th of EDWARD III., st. 1, c. 11, which permits all merchants denizens, not artificers, to pass into Gascony, and to fetch wines thence, "to the end and intent, that by this general license greater plenty may come, and greater [market] may be of wines within the realm." But, four years afterwards, the freedom of trade thus accorded was revoked; as it is directed, by the 42d of EDWARD III., c. 8, "that the wines shall be brought to England by the Gascons and other aliens." The previous statute, however, was renewed by the 43d, c. 2, of the same king, "at the request," it is said, "of his dear-beloved son the Prince, which hath oftentimes complained, that his subsidies and customs of wines in his principality of Aquitaine have been abridged and minished, because that Englishmen do not come there to buy wines as they were wont, and great part of the wines remain unsold." Yet the act repealed is declared to have been found, "on trial (*par assay*), profitable to all the realm." Be this as it may, we have sufficient proof in the subsequent years of EDWARD'S reign, that the trade with Bordeaux flourished greatly: for, in 1372, according to FROISSART, there was seen to arrive at

[m] "Soit pris et areste par le seneschal de Gascoigne ou le conestable de Burdeux, et le corps maunde en Engleterre a la Tour de Londres."

that port, from England, "a fleet of not less than two hundred sail of merchantmen coming for wines[n]."

By the 5th of RICHARD II., st. 1, c. 4, it is ordered, that the best wines of Gascony, Osey, and Spain, and Rhenish wines, shall be sold for one hundred shillings, and the best Rochelle wines at six marks the tun; and, by retail, the former at sixpence, the latter at fourpence the gallon. An extra charge of one penny upon every gallon is allowed for carriage into the country. By the same act, but from what motives it is impossible to say, the retail of sweet wine or clarry (*vin doulce ou clarre*), in England and its dependencies, is strictly forbidden after next St. John's day, under the penalty of forfeiture. In the following year, however, a law passed, authorizing the sale of any sort of sweet wine (*aliqua vina dulcia*), throughout the kingdom, at the same prices as Gascon and Rhenish. In 1381, the price of wine had risen as high as five pounds the tun; but in 1387, if we may credit HOLLINSHED, there was such abundance of that commodity in England, "that it was sold for thirteen shillings and fourpence the tun, and twenty shillings the best and choicest[o]."

In order to cover the harshness and acidity common to the greater part of the wines of this period, and to give them an agreeable flavour, it was not unusual to mix honey and spices with them. Thus compounded, they passed under the generic name of *piments*, probably because they were originally prepared by the *pigmentarii*, or apothecaries; and they were used much in the same manner as the *liqueurs* of modern times. "Our poets of the thirteenth century," says LE GRAND, "never speak of them but with rapture, and as an exquisite luxury. They considered it as the masterpiece of art, to be able to combine, in one liquor, the strength and flavour of wine, with the sweetness of honey, and the perfume of the most costly aromatics. A banquet at which no piment was served, would have

[n] Chronique, Vol. I. c. 311. [o] HOLLINSHED's Chronicles, Vol. III. p. 455.

been thought wanting in the most essential article. The archives of the cathedral of Paris show, that, in the thirteenth and fourteenth centuries, the Deans of Chateaufort were obliged to provide a regular supply of piment for the canons, at the feast of the Assumption. It was even allowed to the monks in the monasteries, on particular days of the year. But it was so voluptuous a beverage, and was deemed so unsuitable to the members of a profession which had forsworn all the pleasures of life, that the Council of Aix-la-Chapelle, held in the year 817, forbade the use of it to the regular clergy, except on the days of solemn festivals[p]."

The varieties of piment most frequently mentioned are the *Hippocras* and *Clarry*. The former was made with either white or red wine, in which different aromatic ingredients were infused; and took its name from the particular sort of bag, termed Hippocrates' sleeve, through which it was strained. There is a curious receipt preserved by Mr. Astle, which gives directions how "to make Ypocrasse *for lords* with gynger, synamon, and graynes, sugour, and turesoll: and *for comyn pepull*, gynger, canell, longe peper, and claryffyed hony[q]." It was drunk at all great entertainments between the courses, or at the conclusion of the repast; and wafers and manchets are directed to be served with it. Clarry, on the other hand, which we have seen noticed in the act of Richard II., was a claret or mixed wine, mingled with honey, and seasoned in much the same way, as may be inferred from an order of the 36th of Henry III., respecting the delivery of two casks of white wine and one of red, to make clarry and other liquors for the king's table at York[r]. It is repeatedly

[p] Vie Privée des François, Tom. III. p. 66. [q] Pegge's Form of Cury, p. 161.

[r] "Mandatum est custodibus vinorum regis de Ebor. quod de melioribus vinis regis quæ sunt in custodia sua faciant habere Roberto de Monte Pessulano duo dolia albi vini et garhiofilacum et unum dolium rubri vini ad claretum faciend. ad opus regis contra instans festum Nativitatis Dominicæ. Et mandatum est Rob. de Monte Pessulano quod festinanter accedat ad Ebor. et garhiofilac. et claret. prædict. faciat, sicut annis præteritis facere consueverat."—Walpole's Anecdotes of Painting, p. 19.

named by our early poets, and appears to have been drunk by many fasting, or as a composing draught before they retired to rest[s]. Of these medicated liquors, the only kinds still in use are the *wermuth*, or wormwood wine, which is manufactured in Hungary and some parts of Italy; and *bishop*, which is prepared by infusing one or more toasted Seville oranges in a certain quantity of Burgundy or other light wine, and then sweetening the whole with sugar[t].

From the manner in which sweet wines are spoken of in the act of Richard II., it might be supposed that they were all compounded artificially, like the liquors just described. But, in the writings of the age, there is abundant evidence that our countrymen were already familiar with several genuine wines of that class; though, at the same time, it must be acknowledged, that the frequent notice of them, in the works alluded to, does not always imply that they were imported into England. Much of the literature of that period consisted of translations from foreign authors; and in copying their descriptions of the customs of other nations, mention would necessarily be made of articles which seldom or never came into general use. It was also a common practice with the early poets, to make an ostentatious display of their knowledge, by giving long catalogues of the products of nature and art, wherever it was possible to introduce them; and many names of commodities were thus pressed into their verses, which, however valuable they may be as historical data, add nothing to the harmony or dignity of the composition. In this way, we may

[s] "For he had yeven the gailer drinke so
Of a clarrie, made of certain wine,
With narcotise and opie of Thebes fine," &c.
Chaucer, Knight's Tale.

"He drinketh Ipocras, clarrie, and Vernage
Of spices hote, to encrease his corage."—Merchant's Tale.

[t] When made with Burgundy or Bordeaux wine, it is called *bishop;* when old Rhine wine is used, it receives the name of *cardinal;* and when Tokay is employed, it is distinguished by the appellation of *pope*.—Ritter's Weinlehre, p. 200.

account for the great variety of wines which these writers delight to enumerate at the feasts they describe; but which could hardly have come together at a time when the relations of commerce were so little multiplied. Thus, in one of the old metrical romances, entitled 'The Squire of Low Degree,' and referred by MR. WARTON to the reign of EDWARD II., the king of Hungary proposes to regale his daughter, not only with the wines of France, Italy, Spain, and Greece, but also with those of Syria;—an assemblage which, even at the present day, it might be no easy matter to realize:—

"Ye shall have rumney, and malmesyne,
Both ypocrasse and vernage wine,
Mount Rose[u] and wine of Greke,
Both algrade[x] and respice[y] eke;
Antioche and bastarde,
Pyment also, and garnarde[z];
Wine of Greke, and muscadell,
Both claré, pyment, and Rochell,
The reed your stomake to defye,
And pottes of osey sett you bye[a]."

In the following century, it is clear, that the prevailing taste for sweet wines led to the importation of all the choicest kinds; for they are frequently noticed, and seem to have been used in considerable quantity. In one of the ordinances for the household of GEORGE,

[u] Monte Rose.

[x] Algarves, or Algadia.

[y] Raspis (*vin rapé*), a rough sweetish red wine, so called from its being made with unbruised grapes, which, having been freed from the stalks, are afterwards fermented along with them and a portion of other wine.

[z] Garnache, or Grenache. There is some reason to believe, that this term may be a corruption of *Vernaccia:* but, at all events, it appears certain, that the wine in question came originally from Greece; for we are told by FROISSART, that, when the Christian forces were besieging the town of Africa, in Barbary, "de l'isle de Candie il leur venoient très bonnes malvoisies et grenaches, dont ils estoient largement servis et confortez."—Chronique, Tom. IV. ch. 18.

[a] RITSON'S Metrical Romances, Vol. III. p. 176.

Duke of Clarence, made on the 9th December, 1469, we find the sum of twenty pounds allowed for the purveying of "Malvesie, romenay, osey, bastard muscadelle, and other sweete wynes[b]." As some of these varieties have not before appeared in our lists, it may be desirable to ascertain their respective characters and history a little more fully.

Though the trade with the Canary Islands had been for some time established, no wines were obtained from them at this period; sugar being still the principal commodity which they supplied. Nor had Spain or Portugal as yet sent us any malmsies. The best dessert wines, however, were made from the Malvasia grape: and Candia, where it was chiefly cultivated, for a long time retained the monopoly. The term *Malmsey* is merely a corruption of *Malvasia*, or rather *Monemvasia*, the name of a small fortified town, in the bay of Epidaurus Limera, whence the grape was originally derived[c].

Another of the above-mentioned wines, designated by the name of the grape, was the Romenay, otherwise Romeney, Rumney, Romanie, or Romagnia. That it could not be the produce of the Ecclesiastical State, as the two last corruptions of the word would seem to imply, may be safely averred; for at no period, since the decline of the empire, has the Roman soil furnished any wines for exportation; and even Bacci, with all his partiality, is obliged to found his eulogy of them on their ancient fame, and to confess, that, in his time, they had fallen into disrepute. By Cogan and others, Romeney is classed among the Spanish white wines; but from what

[b] Collection of Ordinances for the Government of the Royal Household. Lond. 1790, p. 101.

[c] "It was anciently a promontory, called Minoa, but is now an island, connected with the coast of Laconia by a bridge. The name of Monemvasia, derived from the circumstances of its position (μόνη ἐμβασία, *single entrance*), was corrupted by the Italians to Malvasia; and the place being celebrated for the fine wines produced in the neighbourhood, Malvasia, changed to Malvoisie in French, and Malmsey in English, came to be applied to many of the rich wines of the Archipelago, Greece, and other countries."—Researches in Greece, by W. Martin Leake, p. 197.

part of Spain it came, is not specified[d]. Except the small town of Romana, in Aragon, there is no place that bears a similar denomination; and I am not aware, that the wines of that province have ever been much known beyond the places of their growth. The probability is, that it was a wine made from a grape of Greek extraction; and, in fact, Bacci informs us, that the produce of the red and white muscadels, which were cultivated in the Ionian islands, and the adjoining continent, was called by the Italians Romania[e]. In a passage of an old sermon, quoted by Carpentier, the word occurs in conjunction with '*malvaticum*,' or malmsey[f]; and Ben Jonson mentions the 'Romagnia' along with the wine of Candia[g]. The name, however, is not exactly, as Bacci supposes, of Italian origin, but comes from *Rum-Ili*, the appellation given by the Saracens to a considerable part of the continent of Greece; and the several spellings, Romania, Rumania, and Rumenia, correspond pretty closely with the variations in the name of the wine. In confirmation of this view of the subject, it may be remarked, that one of the species of grapes at present grown in Andalusia is termed *Romé negro*, and there can be no doubt that the word 'Romé' is derived from the Arabic, *Rumi*. That the wines of that province were then freely imported into England, and distinguished, as they have always been, by their uncommon strength, is evident from the manner in

[d] "Spain bringeth forth wines of white colour, but much hotter and stronger, as sacke, rumney, and bastard."—Haven of Health, p. 239.

[e] "In editis collibus, nobiles progigni uvas Creticis æmulas, et etiam muscatellas, rubras et albas; ex quibus vini jactant, quæ et voce Italica Romania vocant, quorum non modicam quotannis Venetias transmittunt copiam."—Nat. Hist. Vinor. p. 333.

[f] "Nonne reputaretur insipiens qui optimam Romaniam, vel malvaticum poneret in vase murulento?"—Glossar. in voce 'Romania.'

[g] "Like the merchant, who hath filled his vaults
With Romagnia, or rich Candian wine,
Yet drinks the lees of Lombard's vinegar."
Volpone, Act i. Sc. 1.

which CHAUCER speaks of the white wine of Lepe (now Niebla), between Moguer and Seville:—

> "Now kepe you fro the white and fro the rede,
> Namely fro the white wine of Lepe,
> That is to sell in Fish-streat and in Chepe:
> This wine of Spain crepeth subtelly,
> And other wines growing fast by,
> Of which riseth soch fumosite,
> That whan a man hath dronk draughts thre,
> And weneth that he be at home in Chepe,
> He is in Spain, right at the toune of Lepe," &c.[h]

The *oseye*, otherwise spelled *osoye*, *ossey*, &c., which the act of 5 RIC. II. directs to be sold at the same price as the wines of Gascony and Poitou, appears from the entry above quoted to have been of the sweet kind. In an ordinance of CHARLES VI., cited by LE GRAND, it is noticed in similar company. Some verses, which are inserted in the first volume of HACKLUYT's Voyages, place it among the "commodities of Portugal[i]:" but, on the other hand, a passage in VALOIS' Description of France seems to prove beyond dispute, that *oseye* was an Alsatian wine; *Auxois*, or *Osoy*, being, in old times, the name commonly used for Alsace[k]. If this conjecture be well-founded, we may presume, that *oseye* was a luscious-sweet, or straw-wine, similar to what is still made in that province. That it was a rich, high-flavoured liquor, is sufficiently shown by a receipt for imitating it, which may be seen in MARKHAM[l]; and we learn from BACCI, that the wines which Alsace then furnished, in great profusion, to England, as well as different parts

[h] Pardoner's Tale.

[i] "Her land hath wine *osey*, waxe, and graine."—Vol. I. p. 188.

[k] "Ab Alesia pagus Alesiensis nomen accepit, *Auxois* vulgo, vel cum articulo *l'Auxois*, aut *l'Aussois*, et nonnullis in tabulis *l'Osoy*."—HADR. VALESII. Not. Galliarum. fol. Par. 1675, p. 12.

[l] The English Housewife; by G. MARKHAM. Lond. 1683, p. 115.

of the continent, were of that description[m]. In the 'Bataille des Vins,' we find the 'Vin d'Aussai' associated with the growths of the Moselle.

With respect to *Bastard*, or, as the pointing of the ordinance, if rightly copied, might lead us to name it, *Bastard muscadel*, there is greater difficulty in tracing its history. That it was a sweetish wine, there can be no doubt: and that it came from some of the countries which border the Mediterranean, appears equally certain. MINSHEW and SKINNER suppose it to have been a liquor obtained from dried grapes (*v. passum*)[n]; but all the luscious-sweet wines, as we have seen, are made in this manner:—this definition, therefore, cannot be received. CARPENTIER, on the other hand, pronounces *bastard* to have been a mixed wine (*v. mixtum*); which accords with the assertion of LE GRAND, that it was a wine from Corsica, mingled with honey[o]. In the translation of the 'Maison Rustique,' by MARKHAM, we are told, that "such wines are called *mungrell* or *bastard*, which, betwixt the sweet and astringent, have neither the manifest sweetness, nor manifest astriction, but indeed participate and contain both qualities." This character, however, is far from satisfactory,

[m] "Quo vinorum genere crassissimo abundare testantur cunctas in Alsatia, et secus Rhenum urbes, ac tanta copia, quod majus est, ut quotannis partim vectura curruum, et partim navigatione in vicinas regiones convehantur, in Helvetios, Sueciam, Bavariam, Lotharingiam, et inferiorem Germaniam, et quandoque etiam in Angliam."—Nat. Vinor. Hist. p. 350.

[n] The commentators on SHAKSPEARE translate *vinum passum*, 'raisin wine:' but that this sort of manufacture was then unknown in England, is evident from the ridicule which JONSON, in one of his comedies, attaches to the project 'of making wine of raisins:'—

Eng. "Is not that strange, sir, to make wine of raisins?
Meer. Yes, and as true a wine as the wines of France,
Or Spain, or Italy. Look of what grape," &c.
The Devil is an Ass, Act ii. Sc. 1.

[o] "Le Bâtard étoit un vin de Corse, que les François, dit CHARLES ETIENNE, avoient probablement ainsi nommé, parceque les Corses y mettoient du miel."—Vie Privée des François, Tom. III. p. 49.

as it will apply to many of the finest growths, which have that mixed taste. On the whole, the most intelligible account of the matter is given by VENNER; who says, that "Bastard is in virtue somewhat like to muskadell, and may also in stead thereof be used: it is in goodness so much inferiour to muskadell, as the same is to malmsey[p]." It was, therefore, not a true muscadel wine, though approaching to that class in flavour, and taking its name not from any admixture of honey, which would have reduced it to the nature of a piment, but from the grape of which it was made,—probably a bastard species of muscadine. In support of this conjecture, it may be observed, that one of the varieties of vines now cultivated in the Alto Douro, and also in Madeira, is called *bastardo*, and the must which it yields is of a sweetish quality. Of the Bastard wine there were two sorts,—white and brown[q]; both of them, according to MARKHAM's report, "fat and strong;" the tawny or brown kind being the sweetest. They are frequently mentioned by dramatic authors, especially about the time of Queen ELIZABETH[r]. COGAN, we perceive, calls Bastard a growth of Spain; and SACHS, who agrees with him in this particular, describes it as the heaviest of all wines[s].

In order to prevent frauds on the revenue, it was enacted, by the 1 RIC. III., c. 13, that malmsey, which is said to have been

[p] Via Recta ad Vitam Longam. London, 1628.

[q] "Far in a dungeon lyes a dainty youth,
With his sweet brother, as their names each known,
Unlawfully begotten in the south,
And therefore are call'd Bastarde *white* and *brown*."
Pasquil's Palinodia.

[r] "*Elbow*. Nay, if there be no remedy for it, but that you will needs buy and sell men and women like beasts, we shall have all the world drink brown and white bastard."
Measure for Measure, Act iii. Sc. 2.

"*P. Hen.* Why then, your brown bastard is your only drink."
1 K. Henry IV. Act ii. Sc. 4.

[s] "In Hispania . . . . . Bastardum, quod omnem liquorem gravitate superat."
Ampelographia, p. 445.

brought into the realm in great plenty before the 27th and 28th years of HENRY VI., should in future be imported only in butts of 126 gallons. This statute was confirmed by the 7 HEN. VII., c. 7, which describes the malmsey wines as coming direct from Candia; and, to counteract the duty of four ducats on the tun, which had been recently imposed by the Venetians, ordains, "that every merchant straunger bringing suche malmeseys into this realme shall pay the custume of 18*s*. for a butte of malmesey over and above the custum afore tyme used to be paied." This act, however, was not to extend to any Englishman born, or to "endure any longer than they of Venice should sett aside the imposition of the payment of the 4 dukates aforseid." The price of the butt was fixed at four pounds.

The account which I subjoin of the wines provided for the enthronization feast of Archbishop WARHAM, in the year 1504[t], will show the comparative prices of the principal kinds in use at the commencement of the sixteenth century. This document, indeed, has been supposed by some writers to refer to a much earlier period: but the valuation of the malmsey, it may be observed, corresponds exactly with the sum which the act of HENRY VII. directs to be paid for that wine, at a time when additional duties rendered it much dearer than it had ever before been. In 1532, (23 HEN. VIII. c. 7,) the wines of Gascony and Guienne were forbidden to be sold above eightpence the gallon, and the retail price of "malmeseis, romeneis, sakkes, and other swete wynes," was fixed at twelvepence the gallon, sixpence the pottle, threepence the quart, and three half-

[t] "De vino rubeo vi dolia, prec. dol. 4*l*. . 24 *li*.
De vino claret. iv dol. prec. dol. 73*s*. 4*d*. . 14 *li*. 13*s*. 4*d*.
De vino alb. elect. unum dol. . . 3 *li*. 6*s*. 8*d*.
De vino alb. pro coquina i dol. . . 3 *li*.
De Malvesey i but . . . . 4 *li*.
De Ossey i pipe . . . . 3 *li*.
De vino de Reane ii almes . . . 26*s*. 8*d*."
LELAND. Coll. Vol. VI. p. 30.

pence the pint, upon pain of forfeiting three shillings and fourpence for every gallon sold higher; and authority was given to the Lord Chancellor, Lord Treasurer, the President of the Council, Lord Privy Seal, and two of the chief justices, "to set the prices of all kynde of wynes in grosse." Their labours, however, do not appear to have had much effect in restraining the prices; for we find, by an act of the following year (24 Hen. VIII. c. 6), that divers merchants in the city of London had presumed (such is the phrase employed) to buy and sell the wines of Gascony and Guienne, and French wines, for five pounds the tun, and upwards, contrary to the provisions of the "good and laudable statute" above cited. As the price of wines in gross was thus raised, it was impossible that they could be sold cheap by retail. Accordingly the hardships which the vintners were suffering from this vexatious policy induced them to present a remonstrance, declaring, that they could not buy any good Gascon wines, unless they paid to the merchant at the rate of seven or eight pounds sterling for the tun; or any malmsies for less than six pounds the butt; or "Sackes and Roomneys for less than three pounds and ten shillings the butt; or Bastardes for less than from five pounds, to five pounds six shillings and eightpence the pipe; or muscadels for less than fifteen or sixteen pounds the tun." They also complain, that, with a view to evade the law, the pipe of bastard, which should contain as much as that of sack, was often deficient to the amount of twenty gallons; while the butt of malmsey, in like manner, wanted from twelve to sixteen gallons of the full measure. In order to remedy these grievances, it was enacted, by the 34 and 35 Hen. VIII. c. 7, that the commissioners appointed by the former statute should have the discretionary power of mitigating or enhancing the prices of wines sold in gross, or by retail, as time and occasion should require.

In the sixteenth century, the predilection for sweet wines occasioned a progressive increase of their price. Malmsey, which, in 1492, cost only twopence a quart, sold for twice that sum in 1550:

and, three years afterwards, it rose to fivepence, notwithstanding the act of 7 Ed. VI. c. 5, had once more fixed it at threepence. It appears to have been still the favourite wine, and is the only one of the sweet class specified in the ordinances for the household of Henry VIII[u]. So late as 1526, no notice is taken of any wine from the Canaries: but, towards the commencement of Elizabeth's reign, the English had evidently become acquainted with several new growths; and it is not improbable, that some of the 'sakkes' mentioned in the act of Henry VIII. above quoted, may have been the produce of those islands. The preamble to the act of 1 Eliz. c. 11, states, that, of late years, much greater quantity of sweet wines had been imported into the kingdom than had been usual in former times; but describes them as being made from the same grape, and brought, "through the straits of Marrock or Mallegaye, from the same place as the wine commonly called malmsey." This would imply, that they were still obtained from Candia. We may presume, however, that a considerable portion of them were of Spanish growth, but passed under the name of malmsey, in order to secure a higher price. In 1551, mention is made of a cargo of wine from Scio[x].

The statute of Edward VI. above referred to, which is called "An Act to avoyde Excesse of Wynes," is not confined to the regulation of the prices, but contains various enactments for limiting and controlling the sale of that commodity, in a manner that had not been before attempted. The following clauses, if enforced, which was nearly impossible, could only have tended to embarrass the operations of the regular dealer, and encourage smuggling, over all the kingdom:—

[u] "Item, Malmsey and other swete wines, and butts at 4*d.* per butt £40 0 0
Item, Rhenish wine, 4 fates, every fat containing 3 almez, at
30*s.* the alme . . . . . 18 0 0."
Ordinances for the Royal Household, made at Eltham in 1518, p. 195.

[x] Anderson's History of Commerce, Vol. I. p. 381.

" 1. None but such as can spend one hundred marks of yearly rent, or is worth one thousand marks, or else shall be the son of a duke, marquess, earl, viscount, or baron of the realm, shall have, or keep in his house, any vessel of foreign wine for his family's use exceeding ten gallons, under a penalty of ten pounds for every such offence.

" 2. No taverns for the retailing of wine shall be set up except in towns and cities; and only two taverns shall be allowed for every town or city, except London, which may have forty taverns; Westminster, which may have three; York, eight; Bristol, six; Cambridge, four; Oxford, three; Lincoln, three; Hull, four; Shrewsbury, three; Exeter, four; Salisbury, three; Gloucester, four; West Chester, four; Hereford, three; Worcester, three; Southampton, three; Canterbury, four; Ipswich, three; Winchester, three; Colchester, three; Newcastle, four.

" 3. None of the said taverns, however, shall retail wines to be spent or drunk within the respective houses, on pain of forfeiting ten pounds for every such offence.

" 4. Merchants may use in their own houses, but not sell, such wines as they shall import: also high sheriffs, magistrates of cities and towns, and the inhabitants of fortified towns, may keep vessels of wine for their own consumption only."

The English, however, were now too much accustomed to wine, to be restrained by such enactments from indulging their taste for that luxury. Of the large quantity consumed in those times, we may form some idea from the expenditure for wine at great entertainments, and in the houses of the nobility. At the enthronization feast of G. Nevil, archbishop of York, in the sixth year of Edward IV., one hundred tuns of wine were drunk[y]. His predecessor, Henry Bowet, is reported to have used eighty tuns of claret yearly in his house[z]: and the consumption of wine in the establishment of the

[y] Battely's Appendix to Somner, p. 29.

[z] Drake's History of York, p. 440.

Earl of Shrewsbury exceeded two tuns in the month, as he himself states in a letter to the Marquess of Winchester, written soon after Queen Mary was committed to his keeping; when his lordship's expenses were, no doubt, somewhat greater than usual, on account of this charge. In the Earl of Northumberland's household, however, which was regulated with the utmost economy, the yearly allowance of wine amounted to forty-two hogsheads [a].

The account which Harrison gives of the mode of living in the time of Queen Elizabeth, shows not only the abundance, but the extraordinary variety of wines then used. "As all estates," he remarks, "doo exceed herin, I meane for straungenesse and number of costlie dishes, so these forget not to use the like excesse in wine, in so much as there is no kind to be had (neither anie where more store of all sorts than in England, although we have none growing with us, but yearlie to the proportion of twenty or thirty thousand tun and upwards, notwithstanding the dailie restreincts of the same brought over unto us) whereof at great meetings there is not some store to be had. Neither do I meane this of small wines onlie, as claret, white, red, French, &c., which amount to about fiftie-six sorts, according to the number of the regions from whence they come: but also of the thirtie kinds of Italian, Grecian, Spanish, Canarian, &c., whereof Vernage, Cate piment, Raspis, Muscadell, Romnie, Bastard, Tire, Oseie, Caprike, Clareie, and Malmeseie, are not least of all accompted of, because of their strength and valure [b]."

The 'Vernage,' mentioned in the above list, was a red wine, of a bright colour, and a sweetish and somewhat rough flavour,

[a] "Item, To be payd to the said Richard Gowge and Thomas Percy, to make provision for x ton ii hogisheds of Gascoigne wyne for th' expensys of my house for an hole yere, viz. iii ton of Rede wyne, v ton of Clarett wyne, and ii ton and ii hogisheds of White wine after iiii *l.* iii *s.* iiii *d.* the ton by estimacion, somme xlix *l.*"—Northumberland Book, p. 6.

[b] Hollinshed's Chronicles, Vol. I. p. 167.

which was grown in Tuscany, and other parts of Italy, and derived its name from the thick-skinned grape, *vernaccia* (corresponding with the *vinaciola* of the ancients), that was used in the preparation of it[c]. It is frequently alluded to by our oldest writers, and seems to have retained its reputation till a recent period, for it is highly praised by Redi. 'Cate' is evidently a misprint for Cute (*vin cuit*). 'Tire,' if not of Syrian growth, was probably a Calabrian or Sicilian wine, manufactured from the species of grape called *tirio;* and 'Caprike' may have been wine from the island of Capri, or Cyprus. The nature of the other kinds above enumerated has already been sufficiently explained.

That the inhabitants of the metropolis and southern provinces of the kingdom should have been enabled to display such a profusion and diversity of wines on their tables, is, perhaps, less surprising, than that the same degree of luxury should have previously obtained among the Scots, and given rise to similar complaints on the part of their historians: for a passage in Hector Boece's History of Scotland, which was published in 1526, would seem to prove, that his countrymen were familiar with every kind of wine then used in England[d]. The mention of Africa, however, among the quarters of the globe which traded in that commodity, must be a mistake. The act of the 5th Parliament of Q. Mary, "for suppressing of derth in the realme of vivers and wynis," is conceived in much the same spirit as the laws of the English legislature on the same subject; ordaining, for instance, that no wines entering by the east seas, or at the north land, shall be sold at higher prices than twenty pounds (Scots) for the tun of Bordeaux wine, and sixteen pounds for the

[c] See Bacci, Nat. Vinor. Hist. p. 20, 62.

[d] "Exquiruntur vina non per Galliam modo, quæ propemodum jam sordent, sed per Hispaniam, Italiam, Græciamque: sed ne Africa quidem aliena atque expers execrandæ hujus cupiditatis, sed nec Asia. Hinc enim orbem circumeundo aromata illa omnium irritamenta libidinum comportant, magnis impendiis nec minore vitæ discrimine hominum perniciem conquirentes," &c.

tun of Rochelle; while the retail price of the former is fixed at tenpence the pint, and of the latter at eightpence. Wines coming by the west seas were to be sold somewhat cheaper; Bordeaux wine, namely, at sixteen pounds the tun, and Rochelle at twelve or thirteen pounds. A laudable horror is expressed in the preamble, at all adulteration of the genuine juice of the grape[e]; and tavern keepers are expressly enjoined to refrain from making any mixture of old wines with the new wines of the year, and from putting any water into the same, under pain of forfeiting their whole stock, and losing their franchise.

With respect to the wines called SACKS, which had now come into general use, much diversity of opinion has prevailed; and, although various attempts have been made to explain their nature, and the subject has undergone frequent discussion, especially among those writers who have laboured to illustrate our early poets, the question remains, in a great measure, undetermined. When we consider how familiar our ancestors must have been with this class of wines, and how repeatedly they have been noticed by authors of every description, it appears not a little singular, that their history should now be involved in such obscurity. But, in pursuing the inquiry, we shall probably find, that on this, as on many other points of antiquarian research, the truth lies nearer the surface than has been commonly imagined.

It seems, indeed, to be admitted, on all hands, that the term *Sack* was originally applied to certain growths of Spain. MINSHEW defines it to be "a wine that cometh out of Spain, *vinum siccum*, *vin sec*, *vino seco*, q. d. propter magnam siccandi humores facultatem." SKINNER, however, thinks this explanation unsatisfactory, and inclines to the opinion of MANDELSLO, a German traveller, who published an account of his travels to the East Indies in 1645,

[e] "And besyde the samin, sic wynis as are sould in commoun tavernis ar comounlie be all tavernaris mixt with auld corrupt wynis and with watter, to the greit appeirand danger and seikness of the byaris, and greit perrell of the saulis of the sellaris."

and who derives the name from Xeque, a town in Morocco, whence the plant that yields this species of wine is said to have been carried to the Canary Islands. But in all the catalogues of vines which I have had the opportunity of consulting, there is no mention of any such species. Besides, it was not from the Canaries, but from Spain, that sack was first brought to us.

According to NEUMANN, *sack* signifies properly a wine made from half-dried grapes, which may be so far true: but, as a similar mode of treating the vintage was common in all those countries from which the choicest wines were obtained, this interpretation of the term will not account for its being more particularly applied to the growths of Spain. SACHS, again, is of opinion, that the appellation has a reference to the bags or skins, in which the Spaniards preserve their wines. This surmise, however, is opposed by the fact, that the word *saco* in Spanish, as well as the original Latin, *saccus*, usually denotes a bag made of linen or canvas; while, in the one language, *uter*, and in the other, *borracha*, or *bota*, are the terms by which wine-skins are designated. Nor is there any proof that Spanish wines were ever imported in such receptacles. The common wines of the country may be so kept, but all the finer kinds are preserved in the wood; and, in our older statutes, we have seen constant mention of pipes or butts, as the vessels in which sack was conveyed. If the above etymon, however, were to be insisted on, a more plausible explanation would be, that 'sack' signified a white wine, which, in order to clarify it, was strained through a linen bag, as was the case with the Cecuban and other thick wines of the ancients. SKINNER, on I know not what authority, affirms, that the Italians still employ the phrase *vino del sacco* in a similar sense.

DR. PERCY has the credit of restoring the original interpretation of the term. In a manuscript account of the disbursements by the chamberlain of the city of Worcester for the year 1592, he found

the ancient mode of spelling to be *seck*[f], and thence concluded, that Sack was merely a corruption of *sec*, signifying a dry wine. MINSHEW, as we have seen, renders the term *vin sec;* and COTGRAVE, in his Dictionary, gives the same translation. The most satisfactory evidence, however, in support of this opinion, is furnished by the French version of a proclamation for regulating the prices of wines, issued by the privy council in 1633, where the expression *vins secs* corresponds with the word *sacks* in the original copy[g]. It may also be remarked, that the term *sec* is still used as a substantive by the French, to denote a Spanish wine[h]; and that the dry wine of Xerez is distinguished at the place of its growth by the name of *vino seco*.

These several authorities, then, appear to warrant the inference, that Sack was a DRY Spanish wine. But, on the other hand, numerous instances occur, in which it is mentioned in conjunction with wines of the sweet class. The act of HENRY VIII. speaks of "sakkes or other swete wynes." In like manner, the 'Mystery of Vintners,' published by DR. MERRET in 1675, gives a receipt "to correct the rankness and eagerness of wines, as Sack and Malago, or other sweet wines." GLAS, in his 'History of the Canary Islands,' makes no distinction between Malmsey and Canary Sack; and NICHOLS, in the account which he has given of Teneriffe, expressly says, "that island produces three sorts of excellent wines,—Canary, Malmsey, and Verdona; which all go under the denomination of Sacks[i]." To get rid of the difficulty which thus arises, MR. NARES has recourse to the supposition, that Sack was a common name for all white wines. But it has been already shown, that the appellation was originally confined to the growths of Spain; and

[f] "ITEM, For a gallon of clarett wyne and seck, and a pound of sugar geven to SIR JOHN RUSSELL, iiii *s*."

[g] RYMER'S FŒDERA, Tom. VIII. Part iv. p. 46.

[h] "On dit aussi quelquefois absolument du *sec*, pour dire, du vin d'Espagne."—Dict. de Trevoux.

[i] ASTLE'S Voyages, Vol. I. p. 541.

if it had been used to designate white wines in general, there can be no reason why it should not have been applied to those of France or Candia, which were then imported in large quantity. If, again, we suppose, that the name denoted a sweet wine, we shall be equally at a loss to discover the circumstances which could have given rise to such a distinction between it and the other kinds then in use; not to mention, that such an application of the term would have been wholly at variance with the etymology as above deduced. A more particular examination of the characters assigned to Sack by the few writers who have described it, will perhaps enable us to reconcile these discrepancies, and remove much of the perplexity in which the question has hitherto been involved.

In the first place, we are told by VENNER, that "Sacke is completely hot in the third degree, and of thin parts, and therefore it doth vehemently and quickly heat the body: wherefore the much and untimely use of it doth overheat the liver, inflame the blood, and exsiccate the radical humour in lean and dry bodies[k]." This description accords with the epithet "sprightly," which is given to it in some verses published in 1641[l], and sufficiently proves, that it could not have been of a thick luscious quality, like most of the dessert-wines then in vogue. That, however, it was a liquor of considerable strength and body, may be inferred from a subsequent passage of the last-mentioned work, where it is extolled as "the elixir of wine;"—an expression apparently borrowed from one of BEN JONSON'S plays[m]. HERRICK, again, calls it a "frantic liquor;"—expatiating, with rapture, on its "witching beauties," "generous blood," &c.[n]: and most of the dramatic writings of the age contain frequent allusions to its enlivening virtues and other fascinating

[k] Via Recta ad Vitam Longam, p. 22.

[l] Preparative to the Study or Vertue of Sack. 4to. 1641.

[m] "*Car.* I drink this good draught to your health here, Canary, the very elixir and spirit of wine."—Every Man out of his Humour, Prol.

[n] Farewell to Sack.—HERRICK'S Hesperides, p. 47.

properties. Had there been nothing new or uncommon in the nature of the wine, it could hardly have excited such extravagant admiration, or come into such universal request, at a time when our countrymen were already familiar with the choicest vintages from almost all parts of the globe.

The practice which prevailed of mixing sugar with Sack has been thought by most persons to indicate a dry wine, such as Rhenish or Sherry. Dr. Drake, indeed, is of a contrary opinion, alleging, that there would be no humour in Falstaff's well-known jest on Sack and sugar, if the liquor had not been of the sweet kind[o]. But on this point little stress can be laid; as at that time it was a general custom with the English to add sugar to their wines[p]. The testimony of Venner, however, who has discussed the question, "whether Sack be best to be taken with sugar or without," clearly points to a dry wine. "Some," he observes, "affect to drinke Sacke with sugar, and some without, and upon no other ground, as I thinke, but that, as it is best pleasing to their pallates. I will speake what I deeme thereof, and I thinke I shall well satisfie such as are judicious. Sacke, taken by itself, is very hot, and very penetrative: being taken with sugar, the heat is both somewhat allayed, and the penetrative quality thereof also retardated. Wherefore let this be the conclusion: Sacke taken by itself, without any mixture of sugar, is best for them that have cold stomackes, and subject to the obstructions of it, and of the meseraicke veines. But for them that are free from such obstructions, and fear lest that the drinking of sacke, by reason of the penetrative faculty of it, might distemper the liver, it is best to drinke it with sugar; and so I leave every man that understandeth his owne state of body, to be his own director herein[q]."

[o] Shakspeare and his Times, Vol. II. p. 130.

[p] See Fynes Moryson's Itinerary, Part III. p. 152.—Hentzner's Travels, &c.

[q] Via Recta ad Vitam Longam, p. 23.

A passage in SHAKSPEARE[r], which has been thought to allude merely to the adulteration of sack by the vintners, throws, in fact, much light on its genuine qualities; and proves it to be of the same nature as the wines still manufactured, in Spain and other countries, from the ripest grapes, which receive a sprinkling of burnt lime or gypsum, before they are pressed and introduced into the vat. But, if any doubt remained on the subject, it would be completely removed by the account which SIR RICHARD HAWKINS gives of these wines. "Since the Spanish sacks," he observes, "have been common in our taverns, which for conservation are mingled with the lime in the making, our nation complains of calentures, of the stone, the dropsy, and infinite other distempers, not heard of before this wine came into common use. Besides, there is no year that it wasteth not two millions of crowns of our substance, by conveyance into foreign countries[s]." It thus becomes manifest, that the sacks which were first imported into England in the reign of HENRY VIII., and which had come into general request before the end of the seventeenth century, belonged, as MINSHEW had correctly defined them, to the class of dry wines, and resembled those liquors which still pass under that denomination. If, indeed, we may credit the statement of HOWELL, there was one species of sack known at an earlier period, and that was the Romanie. Nor is the fact unimportant in the history of wines; for it not only affords a further explanation of the latter name, but serves to show, that the Spaniards had borrowed from the Greeks the practice of adding gypsum to the must, which they afterwards improved upon, and perfected to such a degree, as to be enabled to excel all other nations in the manufacture of dry wines. It was from the Ionian islands, as we collect from BACCI, that the Romanie originally came: and, at the present day, there is so little difference between

[r] "*Fal.* You rogue, here's lime in this sack too. There is nothing but roguery to be found in villanous man: Yet a coward is worse than a cup of sack with lime in it."—1 K. Henry IV. Act ii. Sc. 4.

[s] Observations on a Voyage into the South Sea. London, 1622.

the best white wines of Cephalonia and Zante, and some of the vintages of Spain and Portugal, which have been prepared in a similar manner, that a person not much accustomed to observe the nicer shades of distinction among wines, might easily mistake the one for the other. Howell mentions a Cephalonian muscadel, that was imported into England in his time; and Fynes Moryson found an excellent white wine at Palormo, in Natolia, "which," he observes, "is like the Spanish sacke, but more pleasant to the taste, being not so sweete as the Canary wines, nor so harsh and strong as the Sherry sacke[t]."

Sack was used as a generic name for the wines in question: but occasionally the growths were particularly specified. Thus, in one of the scenes in 'The Second Part of K. Henry IV.' we have a laboured panegyric by Falstaff on the attributes of Sherris-sack, or dry Sherry; and for a long time the words Sack and Sherry were used indiscriminately for each other[u]. In like manner, we frequently read of Canary Sack, and find the latter term sometimes employed to express that particular wine[x]; although it differed materially from Sherry in quality, and scarcely came within the description of a dry

[t] Itinerary, Part III. p. 130.

[u] "*Pup. Jo.* A pint of Sack, score a pint of Sack i' the conney.
Cok. Sack? You said but e'en now it should be Sherry.
Pup. Jo. Why so it is, Sherry, Sherry, Sherry."
Bartholomew Fair, Act v. Sc. 6.

"But mine's the house of wine; Sack says my bush;
Be merry and drink Sherry; that's my poesie."—New Inn, Act i. Sc. 2.

[x] "———————— Come hither,
Near me, yet nearer; breathe upon me. Wine!
Wine o' my worship! Sack! Canary Sack!"—Staple of News, Act v. Sc. 4.

"———————— Thy isles shall lack
Grapes, before Herrick leaves Canary Sack."
Welcome to Sack. Hesperides, p. 86.

"*Rayns.* Some Sack, boy, &c.
Draw. Good Sherry-sack, sir.
Rayns. I meant Canary, sir; what, hast no brains?"
Heywood and Rowley's Fortune by Sea and Land. 1655.

wine. "Canarie wine," says VENNER, "which beareth the name of the islands from whence it is brought, is of some termed a Sacke, with this adjunct *sweete*[y], but yet very improperly, for it differeth not onely from Sacke, in sweetnesse and pleasantnesse of taste, but also in colour and consistence: for it is not so white in colour as Sacke, nor so thin in substance; wherefore it is more nutritive than Sacke, and lesse penetrative. It is best agreeable to cold constitutions, and for old bodies, so that they be not too impensively cholericke: for it is a wine that will quickly enflame, and therefore very hurtfull unto hot and cholericke bodies, especially if they be young[z]." This passage is the more deserving of attention, as it not only illustrates the nature of the Canary wine in use at the commencement of the seventeenth century, but shows that there were considerable differences in the quality of the wines which bore the general name of SACKS, and thus removes much of the confusion that has arisen from the misnomer above alluded to. Whether the Canary Islands then furnished any dry wines, similar to those which are now imported from Teneriffe, seems doubtful: but it is clear, that Canary Sack resembled the liquor which still passes under that denomination. Of the precise degree of sweetness which it possessed, we may form some idea from the observation of HOWELL, who informs us, that "*Sherries* and *Malagas* well mingled pass for *Canaries* in most taverns, more often than Canary itself[a]." BEN JONSON mentions his receiving a present of Palm-sack, that is, sack from the island of Palma.

With these decisive authorities before us, we can more readily understand the description which MARKHAM has given of the various kinds of Sack known in his time. "Your best Sacks," he observes, "are of Xeres, in Spain,—your smaller, of Gallicia and Portugall; your strong Sacks are of the islands of the Canaries and of Malligo;

[y] "Give me a cup of Sack,——
An ocean of sweet Sack."—Rule a Wife and have a Wife, Act v.

[z] Via Recta, &c. p. 24.

[a] Familiar Letters, Part II. Lett. 60.

and your muskadine and malmseys are of many parts, of Italy, Greece, and some special islands[b]." It thus appears, that the Xerez wine, though the driest of any then imported, was inferior in point of strength to the growths of Malaga and the Canary Islands; which is much the same character that was given of it at a subsequent period[c]. With respect to the Sacks of Galicia and Portugal, HOWELL would persuade us, that few of them could have been then brought to this country. "There is," he remarks, "a gentle kind of wine that grows among the mountains of Galicia, but not of body enough to bear the sea, called Rabidavia. Portugal affords no wines worth the transporting[d]." This opinion, however, I conceive to be erroneous. In the verses above referred to, which were published soon after the Revolution, the wines of Galicia and Carcavellos are noticed; and there is some reason to believe, that the latter may have been the growth which MARKHAM had in view, when speaking of the Portugal Sacks. SHAKSPEARE and other dramatic writers mention a wine called *Charneco*[e], which, in a pamphlet quoted by WARBURTON, is enumerated along with Sherry-sack and Malaga[f]. According to MR. STEVENS, the appellation is derived from a village near Lisbon. There are, in fact, two villages in that

[b] English Housewife, p. 118.

[c] "The next that stood up, with a countenance merry,
Was a *pert* sort of wine which the moderns call Sherry."
Bacchanalian Sessions. Lond. 1693, p. 5.

[d] Familiar Letters, Part II. Letter 60.

[e] "1 *Neigh.* Here, neighbour Horner, I drink to you in a cup of Sack.
2 *Neigh.* And here, neighbour, here's a cup of Charneco."
II Henry VI. Act ii. Sc. 3.
"As soon I'd undertake to follow her—
Where no old Charnico is, nor no Anchoves."—Wit without Money, Act ii.

[f] "Some drinking the neat wine of Orleance, some the Gascony, some the Bourdeaux. There wanted neither Sherry Sack, nor Charneco, Maligo, nor amber-coloured Candy, nor liquorish Ipocras, brown beloved Bastard, fat Aligant, nor any quick-spirited liquor."—Discovery of a London Monster called the Black Dog of Newgate. Printed in 1612.

neighbourhood, which take the name of *Charneca;* the one situated about a league and a half above the town of Lisbon, — the other near the coast, between Collares and Carcavellos. We shall, therefore, probably not err much, if we refer the wine in question to the last-mentioned territory.

The Malaga Sacks must have been not only stronger, but also sweeter than the other kinds; as, by mixing them with Sherry, a liquor resembling Canary wine was produced. They were doubtless of the same quality as those which have since been so largely imported under the name of Mountain. But that the richest growths of the Malaguese vineyards were not unknown in England at this period, the frequent notice of the Pedro-Ximenes, under various disguises of the name, sufficiently testifies[g].

Judging from what is still observable of some of the wines of Spain, we may easily imagine, that many of the Sacks, properly so called, might, at the same time, be both dry and sweet. At all events, when new, they would belong to the class of sweetish wines; and it was only after having been kept a sufficient length of time, to ensure the decomposition of the greater part of the free saccharine matter contained in them, that they could have acquired the peculiar dryness for which they were distinguished. We find, accordingly, that they were valued in proportion to their age; and the calls for 'old Sack,' as Sack κατ' ἐξοχήν, were very common[h]. We may also presume, that there would be much less difference of taste among the several species of Sack, in their recent

[g] "IMPRIMIS, a pottle of Greek wine, a pottle of Peter-sameene, a pottle of Charnico, and a pottle of Ziattica [Aleatico]."—DECKER's Honest Whore, Part II.

"I am phlegmaticke as may be,
Peter-see-me must inure me."—Laws of Drinking.

[h] "—— Give me Sacke, old Sacke, boys,
To make the muses merry.
The life of mirth, and the joy of the earth,
Is a cup of good old Sherry."—Pasquil's Palinodia. 1619.

state, than after they had been long kept; for even the sweetest wines betray at first some degree of roughness, which is gradually subdued by age; while the character of dryness, on the other hand, will hardly apply to any of the durable wines, as they come from the vat. Mountain and Canary were always sweeter than Sherry; but between the richer kinds there is often a strong resemblance in flavour, which is the less extraordinary, as they are made from the same species of grape, though growing in different soils. It was, therefore, not without reason, that they were considered as "near allied[1]."

The conclusion at which we thus arrive is so far satisfactory, as it proves, that the wines formerly known under the name of SACKS, though they may, upon the whole, have been inferior, yet differed in no essential quality from those with which we are at present supplied by the same countries that originally produced them, and which are still held in such deserved estimation. They probably first came into favour, in consequence of their possessing greater strength and durability, and being more free from acidity, than the white wines of France and Germany; and owed their distinctive appellation to that peculiar sub-astringent taste which characterizes all wines prepared with gypsum.

That the partiality for this class of wines, and particularly for the growths of Spain, prevailed to an extraordinary degree at the beginning of the seventeenth century, may be seen from the following ordinance of JAMES I., which is dated the 17th July, in the second year of his reign:—

"Whereas in times past Spanish wines, called Sacke, were little or no whit used in our court, and that in late years, though not of ordinary allowance, it was thought convenient that such noblemen and women, and others of account, as had diett in the court, upon

[1] "Two kinsmen neare allyde to Sherry Sack,
Sweet Malligo and delicate Canary."—Pasquil's Palinodia.

their necessities by sicknesse or otherwise, might have a bowle or glasse of Sacke, and so no great quantity spent; We understanding that within these late years it is used as common drincke and served at meales, as an ordinary to every mean officer, contrary to all order, using it rather for wantonnesse and surfeitting, than for necessity, to a great wasteful expense; We, considering that oftentimes sundry of our nobility and others, dieted and lodged in our court, may for their better health desire to have Sacke, our pleasure is, that there be allowed to the sergeant of our seller twelve gallons of Sacke a day, and no more."

Some years afterwards the preference seems to have been given to the Canary wine, which Howell assures us, "is accounted the richest, the most firm, the best bodied, and lastingest wine, and the most defecated from all earthy grossness of any other whatsoever. French wines," he continues, "may be said to pickle meat in the stomach, but this is the wine that digests, and doth not only breed good blood, but it nutrifieth also, being a glutinous substantial liquor. Of this wine, if of any other, may be verified that merry induction, that good wine makes good blood, good blood causeth good humours, good humours cause good thoughts, good thoughts bring forth good works, good works carry a man to heaven; *ergo*, good wine carrieth a man to heaven. If this be true, surely more English go to heaven this way than any other; for I think there is more Canary brought into England than to all the world besides[k]." In consequence of the universal demand for this sort of wine, the price rose considerably: and, when the Canary company was established in 1665, it was declared to have "increased to double the former value." In 1641, the trade had been opened with Madeira, for supplying our American colonies with wines; and the statute of the first parliament after the Restoration, by which a tonnage was granted to the king, on all wines brought to England,

[k] Familiar Letters, Part II. 60.

notices the growths of that island among the kinds then imported. They are classed with the "wines commonly called sweet," of which the list is pretty extensive, viz. "Muscadels, Malmseys, Cuts (i. e. *vins cuits*), Tents, Allicants, Bastards, Sacks, Canaries, Malligoes, Maderaes."

It is worthy of remark, that at this period, and for a long time afterwards, most wines were drunk from the wood. An act of 1638 even prohibits the retailing of wine in bottles; and directs it to be sold in future by just measures alone. Nothing could be more absurd than such an enactment, or more calculated to encourage every species of fraud and adulteration: for the lighter wines cannot, by any art, be preserved above a certain number of months in the cask; and if they are not secured from decay, by being put into bottles at the proper time, will soon become unfit for use. If the vintner, then, be prevented from taking this precaution, when necessary, with regard to any part of his stock, he must either submit to the loss of so much wine, or else resort to such admixtures as will cover its defects, and check its tendency to spoil. But these generally alter its nature, and destroy all its finer qualities. There are also wines that will not bear distant carriage except in bottle; as, for instance, those of Florence, which have never been imported into England in any other manner, and which the retailers, therefore, could hardly sell, in their genuine state, by measure. The injurious tendency of the above-mentioned regulation, indeed, is so manifest, that I should have passed it unnoticed, if it had not served to explain the origin of the complaints concerning the frequent adulteration of wine by the vintners, as well as the object of the numerous receipts for "mending and restoring" wines, which are met with in old writers; and also to throw some light on the general quality of the wines which were drunk by our ancestors.

The great increase in the price of all wines which had now taken place, is shown by the order in council of 1633, which directs, that

"Canary wines, Muskadells, and Alligant, should be sold in gross at 17*l.* per pipe, and at 12*d.* the quart by retaile; Sacks and wines of Malaga at 15*l.* the butt in gross, and at 10*d.* the quart by retaile; the best Gascoigne and French wines at 18*l.* the tonne, and at 6*d.* the quart by retaile; and the Rochelle wines, and other small and thin wines, at 15*l.* the tonne in gross, and at 6*d.* the quart by retaile." The prices, however, still continued to advance; and, twenty-seven years afterwards, it was thought necessary to fix them anew. By the 12 Car. II. c. 25, it is provided, that "no Canary wines, Muskadel, or Alegant, or other Spanish or sweet wines, shall be sold or uttered by retail for above one shilling and sixpence the quart; that no Gascoigne or French wines shall be sold by retail above eightpence the quart; and that no Rhenish wines whatsoever shall be sold by retail above twelvepence the quart, under the penalty of five pounds for every such offence." By the subsequent acts, 19 and 20 Car. c. 5, 6, which are the last that limit the prices of this article, a duty of fourpence per quart was imposed on French, and of sixpence per quart on Spanish wine; and it was ordered, that no French wines should be sold for more than twelvepence the quart, and no Spanish wines for more than two shillings; the additional duty being included.

Besides the wines already enumerated, several others came into notice during the latter half of the seventeenth century. Hitherto we have seen no mention of the growths of Champagne; nor is it likely that they were then much known in this country. Venner, it is true, speaks of the wine of Ay as far excelling all other kinds, but confines the use of it to the kings and peers of France. In 'The Mystery of Vintners,' published by Dr. Charleton in 1692, the name does not occur; and the only record of the importation of Champagne at an earlier period, that I have met with, is a letter of Guy Patin, written in 1666, in which he states, that Louis XIV. "had made a present to the king of England of two hundred hogsheads of excellent wine, viz. Champagne, Burgundy,

and Hermitage." It therefore probably still continued to be what VENNER terms it — "a regal wine."

Among Rhine wines, those of Hochheim and Baccharach are the only kinds distinctly specified[1]. The latter, as we have seen, is placed by SACHS at the head of all the growths of the Rhine; but from what can be learned concerning its history, there is some difficulty in believing, that it ever could have merited this distinction. The vineyards of the Rhinegau had been for several centuries in a high state of cultivation; but most of them being the property of ecclesiastical dignitaries and monks, their choicest produce would seldom come into the market. At Baccharach, however, there may have been a general depot for the wines of the adjacent territories, as was afterwards the case at Bingen; and in this way several of the better sorts may have passed under that name, though they did not grow in the immediate vicinity of the place from which they received their denomination. As Rhenish, in general, is pronounced by the author of the Bacchanalian Sessions to have been "at best but a kind of hermaphrodite wine," we may presume that none of the finest quality was then imported. What growths MARKHAM can allude to, under the uncouth names of *Elstertune* and *Barabant*, I confess myself wholly unable to conjecture.

[1] "*John.* ——— What wine is it?
Fred. Hock.
John. By the mass, brave wine."—Chances, Act v. Sc. 3.

"Those win the day that win the race;
And that which would not pass in fights,
Has done the feat with easy flights,
Recover'd many a desp'rate campaign
With Bourdeaux, Burgundy, and Champaign;
Restor'd the fainting high and mighty
With brandy, wine, and *aqua vitæ;*
And made 'em stoutly overcome
With Bacch'rach, Hockamore, and mum."
Hudibras, Part III. Canto 3.

The wines of Tuscany had long been in high estimation, and served, in some measure, to supply the place of those rich malmseys, which the conquest of Candia and Cyprus by the Turks must have rendered scarce, and difficult to procure. A quotation from one of Beaumont and Fletcher's comedies, given in a preceding chapter, would imply, that the *Verdea* was not brought to England at the commencement of the seventeenth century: yet Howell adverts to it as one of the wines imported in his time. Afterwards the Florence wines became very common, being met with not only in private houses, but in taverns; where, however, if we may judge from Swift's report, they were usually of wretched quality[m]. The same author mentions his receiving from Mr. St. John a chest of that wine which the Great Duke was in the practice of sending over to the chief ministers, and which he says "he liked mightily;" but, within a fortnight from the time he got it, he complains, that it had begun to spoil, and become almost unfit for use[n].

As few persons kept much store of wine in private cellars, and the chief consumption was in taverns, where it was drunk from the cask, the whole quantity existing in the country, at any period, could never have been considerable, and the prices were consequently liable to great fluctuations from every cause that affected our foreign trade. When the war with France broke out in the summer of 1689, the price of claret rose very rapidly; and, in the course of two or three years, the stock on hand was completely exhausted. As the growths of Bordeaux were in general request, it became necessary to find some substitute for them: and this was the red wine of Portugal, which appears to have been then imported

[m] "To-day Ford and I set apart to go into the city to buy books; but we had only a scurvy dinner at an alehouse, and he made me go to the tavern, and drink Florence, four and sixpence a flask; damned wine!"—Journal to Stella, Jan. 9, 1710-11.

[n] "Do you know that I fear my whole chest of Florence is turned sour, at least the two first flasks were so, and hardly drinkable? How plaguy unfortunate am I! and the secretary's own is the best I ever tasted."—Journal, April 5, 1711.

for the first time. In the 'Farewell to Wine,' published in 1693, it is spoken of as having been till that time wholly unknown[o]: and the qualities ascribed to it on the same authority prove, that it must have differed essentially from the strong and full-bodied wine at present supplied by Portugal; for it is described as "spiritless and flat[p]," — a censure which, whatever may be its other characters, it certainly does not now deserve. Probably, as before observed, the manufacture was in an imperfect state; and the Portuguese had not as yet learned the art of disguising their weak wines by the addition of brandy. Other red wines are mentioned as in use at this period; as, for instance, those of Syracuse, Barcelona, and Navarre, which, it is said, "would all be thought claret, but were named the red Port." A red kind of Sherry is also noticed, but with no great commendation.

The renewal of hostilities between England and France, at the commencement of the eighteenth century, rendered us again dependent on the Portuguese vintages: and the celebrated Methuen treaty, by which we became bound to receive the wines of Portugal in exchange for our woollen manufactures, and to deduct from the duty on importation one-third of the rate levied on French wines, fixed that dependence. Previously to this time, the vineyards on the banks of the Douro were confined to a few spots; and the wines sent to England were chiefly those of Lisbon, or the adjacent country. But the new stimulus which was given to this branch

[o] "Some Claret, boy!—'Indeed, sir, we have none.
Claret, sir—Lord! there's not a drop in town.
But we have the best red Port.'—What's that you call
Red Port?—'A wine, sir, comes from Portugal:
I'll fetch a pint, sir.'"—P. 21.

[p] "Mark how it smells. Methinks, a real pain
Is by its odour thrown upon my brain.
I've tasted it—'tis spiritless and flat,
And has as many different tastes,
As can be found in compound pastes," &c.—P. 22.

of commerce, naturally led to an extension of the vineyards in those districts where the wines best adapted to the English market were produced. Several British merchants had settled at Oporto, and in the neighbouring town of Viana; and to them is ascribed the merit of having first encouraged the proprietors of lands in the Upper Douro to devote themselves to the cultivation of the vine. But as the demand for the wines of that territory continued to increase, and the produce of the new vineyards was necessarily often of inferior quality, the growers and dealers resorted to various expedients for supplying the deficiency in the quantity required for exportation, and, by their injudicious admixtures and adulterations, again brought the growths of Portugal into temporary disrepute; though the Methuen treaty always ensured to them a considerable sale.

The impolicy of that treaty will not now be denied, especially as there is reason to believe, that its provisions have been less religiously observed by the Portuguese than by the British government. When it was formed (in the year 1703), there was certainly nothing in the wines of Portugal to entitle them to so decided a preference; and though, at first, it may have caused more care to be bestowed on their manufacture, yet its eventual tendency has been to retard that improvement in their quality, which a free competition with other countries would have produced. It has also checked the introduction of the wines of France, many of which are both better and cheaper; it has led to the importation of a large quantity of mixed liquors, under the name of Port wine, from other places than Oporto, especially from the island of Guernsey[q]; and, what is still worse, it has encouraged, in this country, the manufacture of various deleterious compounds, of which the juice of the grape

[q] In the year 1812, according to the custom-house books of Oporto, 135 pipes and 20 hogsheads of wine were shipped for Guernsey. In the same year there were landed, at the London docks alone, 2545 pipes and 162 hogsheads of wine from that island, reputed to be Port.—Review of Discussions relating to the Oporto Wine Company, p. 26.

forms no part. The views of commercial policy entertained by our ministers may have induced them "to discourage the consumption of French wines:" but assuredly they cannot plead, in justification of their measures, that the subjects of the realm have been thereby supplied with a more palatable and wholesome beverage.

The apology usually offered for high duties on wine, or any other article of luxury, is, that the burthen will fall only upon those who are best able to bear it. A little reflection, however, will convince us, that this is not exactly the case. By taxing any commodity excessively, the use of it will, no doubt, become confined to the wealthiest classes: and, since the Methuen treaty, this may be said to have proved the case with the wines of France[r]. But the quantity of French wines drunk in England forms but a very small part of the annual consumption; and to those who are able and willing to purchase them, it is seldom a matter of much moment, whether or not they shall pay the duty of an additional shilling upon every bottle. It is, therefore, on the middling classes, on the drinkers of Port and Sherry, that this tax presses most severely; and the consequence of every new imposition has invariably been to lessen their consumption in a very marked degree, and, in some cases, nearly to stop it altogether. Another vexatious effect of high duties is, that they tend to prevent the introduction of the ordinary kinds of wine, which otherwise would be imported in great abundance, and with manifest benefit to the revenue. When the custom and excise on a gallon of wine amount to eight or ten shillings, the consumer will seldom choose to pay that sum on an inferior article, of which the original cost is, perhaps, only a few pence; but will prefer having a less quantity of a better growth, in order that the value may appear in some measure commensurate with the duty. In former times, when fewer distinctions existed among the qualities of wines, at least of those that came into general circulation by commerce, there may

[r] See Tables in Appendix, No. VIII.

have been less injustice in taxing all kinds equally; and, besides, the duty generally bore a small ratio to the original price. Now, however, it far exceeds the prime cost on all but those of the very finest quality; and operates in so disproportionate a manner, that the rich nobleman who chooses to import Tokay at a guinea the bottle, pays scarcely ten per cent on the value, while the man of moderate fortune, who purchases, for common use, a cask of good ordinary French wine at eightpence the gallon, must submit to a tax of more than fifteen hundred per cent.

Although our American colonies, from the time of the Protectorate, were chiefly supplied with wines from Madeira, yet the growths of that island seem to have been little used in England until the middle of the last century. Spain, and Portugal, and the Canaries, still furnished the stronger white wines; and Rhenish came in place of the light growths of France. Our officers who had served in the West Indies, and become acquainted with the excellence of the Madeira wines, are said to have introduced, on their return, that general taste for them which has since continued to prevail in this country. Madeira now sends us the only wine known here by the name of malmsey.

Since the acquisition of the Cape of Good Hope by the British government, it has been thought expedient to admit the wines of that colony, on the payment of a duty which amounts to only one-third of the custom levied on Port wine. When they first came into notice, the importation of Spanish and Portuguese white wines had been much diminished by the progress of the French war; and this circumstance, concurring with their cheapness, gave them a temporary advantage. But, as every one acquainted with them might have anticipated, they have already fallen into complete disrepute; for all of them are tainted with that radical imperfection that has been pointed out in a preceding chapter, to which no length of usage can ever wholly reconcile the palate. The impositions of inferior dealers, which usually follow the increased

demand for any new wine, have also contributed to accelerate their downfal. "The manufactured trash," as a writer in a periodical work justly observes, "which is selling in London under the names of Cape Champagne, Burgundy, Barsac, Sauterne, &c. are so many specious poisons, which the cheapness of the common and inferior wines of the Cape allows the venders of them to use as the basis of the several compositions, at the expense of the stomach and bowels of their customers, and of the little share of character which the real Cape wines had acquired[s]."

The case is nearly similar with respect to the Ætna and other wines of Sicily, which came into notice about the same time, and of which a considerable importation took place some years ago. In order to qualify them for the English taste, it was thought necessary to add to them a large quantity of brandy, which totally ruined the little flavour they originally possessed, and which, in some instances, raised the proportion of pure alcohol obtained by distillation as high as thirty per cent. For the most part they were extremely rough, in consequence of having been fermented with the stalks; and, as the brandy mixed with them was of an inferior description, and probably distilled from little else than the refuse of the press, or the lees of the worst wines, the flavour imparted to them was exceedingly harsh and disagreeable.

From the preceding details it is manifest, that the taste of the English in wine has varied considerably during the two last centuries. For five or six hundred years, the light growths of France and of the banks of the Rhine were imported in largest quantity; while the rich sweet wines of the Mediterranean and the islands of the Archipelago were held in highest estimation. Then came the dry white wines of Spain, which, for a time, were preferred to all others, on account of their strength and durability. At the close of the seventeenth, and beginning of the eighteenth centuries, the red growths

[s] Quarterly Review, No. XLIII.

of the Bordelais were in most frequent demand: but the wars in which the country was then involved, put a stop to their importation, and led to the substitution of the rough vintages of Portugal. From the long continued use of these strong dry wines, which are made doubly strong for the English market, the relish for sweet wines, which was once so prevalent, has gradually declined; and several kinds, such as Canary, Mountain, &c., which, as several of my readers may be old enough to remember, were drunk very generally by way of "morning whet," are now scarcely ever met with. Since the peace of 1814, the renewal of our intercourse with the continent has tended to revive the taste for light wines, and to lessen materially the consumption of the growths of Portugal and Spain.

CHAPTER XII.

OF CERTAIN MODES OF KEEPING AND MELLOWING WINES.

LITTLE advantage is gained by the production of a good wine, if due care be not taken to preserve it from decay, and to bring it, by skilful management, to that maturity and perfection which it can alone derive from age. By the first fermentation the constituents of the must are partially decomposed, and converted into alcohol: but it is only during the secondary, or insensible fermentation, that the new combinations into which they have entered, acquire sufficient firmness to resist further decomposition; while those substances which tend to injure the purity of the liquor, and lessen its durability, are gradually separated in such a form as to admit of easy removal.

According to Rozier, all wines may be regarded as containing within themselves the causes of their degeneration. With equal truth it might be affirmed, that all wines contain within themselves the principles of improvement; and that their decline is chiefly attributable to the operation of external causes. Considering the carelessness with which the manufacture is generally conducted, the wonder is, not that so few wines should keep, but that any wine should keep at all. When the grapes, however, are of good quality, and are treated with the requisite skill and attention, the product of the fermentation ought to be entirely free from defects: and those which it may afterwards contract, will, in most instances, be found to proceed either from the impurity of the vessels into which it is introduced; from the vicissitudes of temperature, or the motion to

which it is subjected; or from the neglect of the proper means of defending it from the contact of the atmospherical air. In wines of a strong and full body, which have been freed from all superfluous extractive matter, or which contain an excess of saccharine principle, such, for example, as good malmsey or muscadine, it is difficult to say what should produce decomposition. When carefully preserved in bottle, they give scarcely any deposit; and the quantity of alcohol suffers no diminution, but, on the contrary, rather increases in proportion to the length of time they are kept. Some Mountain, which was buried in the fire of London, and dug up about twelve years ago, was found to be more spirituous than recent Malaga wine; and its quality, in other respects, was unimpaired[a].

Though many of the usages which were adopted by the ancients, for preserving and meliorating their wines, have fallen into disrepute, we have seen that others are still sanctioned by modern practice. Nothing, in fact, can be more judicious, than the general rules which they have given for the site and construction of a wine-cellar, or their observations on the proper time for tasting and racking wines, and on the management of such as are benefited by exposure to a high temperature. The very circumstance of the great durability of a large proportion of their vintages, proves that in this branch of art they had made no small proficiency; and the more we learn of the history of their operations, the more we shall find them to have been acquainted with the supposed improvements of later times.

Into the details of the methods now followed in the treatment of wines in the cellar it is not my intention to enter. Such details would be, in a great measure, foreign to the principal design of this work: and I only advert to the subject, for the purpose of noticing some phenomena, connected with the secondary fermentation, which have hitherto been but imperfectly investigated; though a more accurate examination of them would probably lead to important

[a] Journal of Science, Vol. I. p. 136. See APPENDIX, No. II.

practical results. It may perhaps appear premature to attempt an explanation of the changes that take place in a compound, of which not even all the constituent principles are as yet thoroughly known; and, with our present insufficient methods of analysis, any great approach to precision on this matter is not to be expected. There are, however, certain well-established facts, from which we may venture to draw a few deductions: and, if they should ultimately prove erroneous, the exposure of their fallacy will, at least, have the effect of facilitating the researches of those who may afterwards pursue the inquiry.

Wine is known to be most liable to acescency at those seasons of the year when there is the greatest tendency to a renewal of fermentation. In spring this effect is produced by the transition from cold to heat; in autumn, by the frequent and sudden vicissitudes of temperature, which are common about that period, causing a corresponding expansion or condensation of the body of liquor, and of the air contained in the cask. The disposition to acidity is always augmented by the presence of the lees, and other impurities in the wine. Hence the utility of decanting it into clean vessels before each equinox, and of fining it immediately after each racking, if not sufficiently clear. This is particularly necessary in the case of all the weaker kinds. Those which will not bear complete clarifying are most liable to spoil, and are, consequently, unfit for the purposes of commerce. But the too frequent repetition of the process is apt to impair the flavour and body of the liquor.

Wines appear to be mellowed in two ways,—either by the disengagement of such ingredients as obscured the delicacy of their flavour and aroma, or by the more intimate union and concentration of the remaining component parts. All the stronger kinds, particularly those which have been fermented in the vat, give a large sediment in the wood; and it is only after the whole of the superabundant mucilaginous matter, with a large portion of their tartar, has been deposited, that they become fit for bottling. After they

are bottled, the precipitation of the tartar continues in a slight degree, and, in the red wines, generally carries along with it a quantity of the colouring matter; forming a dark crust on that side of the bottle which happens to be undermost. It would appear, however, that some wines are less apt to form this crust than others. In Port wines it is always seen: but in those of Medoc it is rarely observable, at least when they have been properly matured and fined, previously to bottling; and their colour becomes even deeper as the deposition of tartar proceeds. In white wines, on the other hand, the tartar shews itself in the form of pellucid crystals, adhering to the cork and side of the vessel, and consisting generally of pure supertartrate of potash, but containing sometimes other saline substances, which may have been combined with it. The crystals, for instance, which have been deposited in some Paxarete about forty years old, were found by Dr. Prout to exhibit a quantity of sulphate of lime; thus proving, that, when gypsum is used in the fermentation of the must, a portion of it enters into solution, and remains for a long time suspended in the wine. It may also be worthy of notice, that the whole interior surface of the bottles, in which this wine has been kept, is incrusted with a slight film, probably composed of the last-mentioned neutral salt; but the quantity is too minute to admit of easy examination. In the bottles containing some other old Spanish wines, which, however, are partly spoiled, I have observed a similar tendency to opaqueness.

This precipitation of saline substances is evidently owing to the more thorough union that takes place between the other component parts of the wine, as it increases in age. The acidulous tartrate of potash is but little soluble in water, and not at all in alcohol. In proportion, therefore, as the alcohol is evolved, and amalgamated with the aqueous principle of the wine, this salt is gradually separated in a solid form, bearing along with it the other ingredients that may be of equally difficult solution. Such, at least, is the

probable explanation of the deposit in bottles. But, while the wine remains in the wood, another cause contributes to produce the same effect; and this is the evaporation which is constantly going forward from the surface of the vessel, varying in quantity, according to the nature of the material of which it is composed, and according to the temperature of the surrounding air. In casks of chesnut, as we have seen in a preceding chapter, it advances with rapidity; in those of mulberry, oak, or other close-grained woods, it proceeds more slowly: in all of them, however, it occurs to a greater or less degree, as any one may be convinced by observing the vinous odour which is diffused through a cellar where wines are stored in the wood, however thick the substance of the casks, and however carefully they may be bunged. But certain facts, relating to this process, seem to prove, that the wood exerts a species of elective attraction on the more volatile part of the fluid, and allows a larger proportion of the alcohol, than of the water, to exhale. For example, the brandy exported from Cette in chesnut casks, although shipped of a strength above proof, has, when it arrived in Holland or Germany, been found to be considerably under proof; and the numerous complaints which were made in consequence by the merchants, have induced the French government to prohibit the exportation in any but casks of oak[b]. It is also well known, that Rhine wines, which are kept longer than most others in the wood, lose much of their strength as they advance in age; the proportion of alcohol being often reduced to one-half the original quantity. It may, indeed, be alleged, that the difference arises merely from the greater volatility of the alcohol: but some recent researches on the subject would seem to shew, that this is not exactly the case, and that the evaporation in question is to be explained on other principles.

By a series of experiments, which were instituted originally, I believe, with a view to determine the strength of spirit best adapted

[b] Traité sur la Culture de la Vigne, Tom. II. p. 292.

for the keeping of anatomical preparations, Dr. Soemmerring found, that certain substances allow the aqueous part to escape more freely than the alcohol; while others, again, are permeable to the latter fluid, but resist the passage of water;—the respective evaporation, however, depending, in some degree, upon the strength of the spirit. For instance, a spirit, consisting of equal parts of pure alcohol and water, inclosed in a glass vessel, the mouth of which was covered with a piece of bladder, lost more water than alcohol; but, when raised to 62°, it passed through the bladder unchanged: and the same was the case when a spirit of 42° was placed in a vessel with an air-tight cover of fir-wood. In glasses that were protected by coverings of elastic gum, on the other hand, the strength of the contents was diminished, in consequence of the greater relative evaporation of the alcohol[c]. From the facts thus established, Dr. Soemmerring conceived the idea of improving wines, by subjecting them to a similar process. He accordingly filled a common Bohemian wine-glass with Asmanshäuser, covered it with ox-bladder, and allowed it to remain for eighty-one days undisturbed, in a warm and dry room. During this time one-half of the quantity inclosed had evaporated; and the residue was not only free from all mould, motheriness, or acidity, but had acquired a more spirituous, and, at the same time, more mellow and agreeable flavour and aroma, than the wine originally possessed. The colour was considerably heightened; a crystalline coat, or film, had formed on the surface; a deposit of crystals had also taken place at the bottom of the glass; and the proportion of alcohol was exactly doubled;—the areometer shewing an increase of from 4.00 to 8.00. The repetition of the experiment was attended with similar results; proving, that wines thus treated may acquire, in the course of a few weeks or months, the same degree of mellowness, which they only attain in as many years, when kept in the usual way[d].

[c] Denkschriften der Königlichen Academie der Wissenschaften zu München, für die Jahre 1811, 1812, p. 273.

[d] Denkschriften, &c. für die Jahre 1814, 1815, p. 137.

It may, perhaps, be objected, that the great loss occasioned by this process renders it inapplicable to the melioration of wines on any considerable scale. But it is observable, that, in the experiments just described, only a small quantity of fluid was employed, and the surface was proportionably large. Had it been exposed in a narrow-mouthed vessel, the evaporation would necessarily have been less. Some Rhenish wine, which has now been undergoing the operation for six years, in common quart bottles, shews a diminution of about three ounces in each bottle. The specific gravity of the residue is augmented; and the increased quantity of acid and spirit bears a very exact relation to the quantity of water that has disappeared. On comparing this wine with some of the same vintage which had remained in corked bottles, its flavour and aroma had become so much more mellow and fragrant, that I had some difficulty in persuading myself of the original similarity of the two samples.

These experiments and observations tend to prove, that the melioration of wines in the wood is partly, if not principally, effected by the disengagement of a portion of their alcohol and water, while the remaining ingredients become more firm and concentrated; and to shew likewise, that this melioration will be best accomplished in such vessels as most effectually retain the spirituous, while they allow the aqueous particles to transude. Even should the alcohol escape in largest proportion, as appears to be the case with Rhine wines, when kept any length of time in the cask, the more delicate qualities of the liquor are, nevertheless, materially heightened; and, perhaps, no wines receive so much improvement by evaporation, as those which contain a large quantity of adventitious spirit. Hence one great advantage obtained by transporting them to a tropical climate, or exposing them to the influence of artificial heat. The change which takes place in the flavour of the wines of Madeira, when subjected to this process, is particularly striking. When new, these wines are characterized by a degree of roughness, harshness, and fieriness, which renders them absolutely unfit for use; and the

drier kinds have not unfrequently a marked acidity to the taste, which, to a person unacquainted with their general qualities, would appear to predict a speedy decay. Yet it generally happens, that during the voyage, or after they have been kept for some time in a high temperature, this sharpness wholly disappears, or, at least, becomes greatly subdued. That there existed originally a redundancy of the acid principle in these wines, seems very certain; and its disappearance can only be attributed to the deposition of a large portion of their tartar; which is necessarily accelerated by the rapid evaporation and strong secondary fermentation that ensue on exposure to heat. It is also worthy of notice, that the colour of such of them as have been procured from the last pressings of red grapes becomes completely altered, probably in consequence of the excess of alcohol which they contain. From a pink or claret, it passes to an orange or amber hue; contrary to what occurs in the case of the Medoc wines, which, as before observed, grow darker, in proportion as the tartar is separated.

These considerations naturally lead us to the inquiry, which is of some importance,—whether large or small vessels are to be preferred for the conservation of wines. In a former chapter it was stated, that the rough and strong vintages of the Rhine are most thoroughly mellowed in large casks, but that the more delicate growths are most advantageously kept in small. In the latter case, however, it is obvious, that the evaporation must proceed more rapidly, from the comparatively larger surface exposed; while, in the former, the secondary fermentation will be quickened by the greater bulk of the fluid. The size of the cask ought, therefore, to be determined by the nature of the process we think most likely to promote the melioration of the wine. That which is of a strong and full body, and contains much mucilaginous-extractive matter, like Port, will be most effectually mellowed in large tuns; while the finer white wines, the maturity of which depends on the concentration of the more solid constituents, will be soonest brought to perfection in

vessels of moderate capacity. For instance, it has been occasionally observed, with regard to two samples of Sherry, the produce of the same vintage, and shipped from Cadiz in the same condition, but the one in butt, and the other in a half-butt, or hogshead,—that the latter, on its arrival in England, proved of a more mellow and delicate quality, than the former; but I am not aware, that the merchants of Oporto have ever found it expedient to export their wines in any thing less than full pipes, except when requested to do so for the accommodation of particular customers. It must be acknowledged, however, that no invariable rules can be laid down on this subject. Much will depend not only on the original quality of the vintage, but also on the stage of the secondary fermentation which it may have reached. After a certain period, even Port wine may be injured by being kept in vessels of too great size, unless they are of such materials as will effectually protect it from the influence of the external air.

CHAPTER XIII.

OF THE MIXTURE AND ADULTERATION OF WINES.

ALTHOUGH there is no positive standard of taste in wines, and the demand for particular sorts is liable to great fluctuation, from the influence of fashion and caprice; yet there are certain qualities which may be deemed essential, and with respect to which all men are agreed. Some persons may like the sweet, others the dry wines; some the light, others the stronger kinds: but no one will choose a flat and insipid vintage, in preference to that which is distinguished by the fulness of its body and richness of its flavour and perfume; or, when purchasing a supply, will be disposed to overlook the equally indispensable requisites of firmness and durability. These qualities, however, are seldom found combined, except in first-rate wines, which, being grown in very limited quantity, sell at high prices, and are procured with difficulty. Indeed, generally speaking, they may be said to be little known; for many of them, being the produce of private vineyards, are never to be purchased, or, if they are, must be bespoke before the vintage; and, of the remainder, a considerable portion is reserved by the farmer or merchant, for the purpose of mingling with those of inferior quality. Even the secondary wines are not easily to be had pure and unadulterated, but frequently undergo preparation before they are brought into commerce. Of some of these preparations, and of the manner in which they affect the qualities of the commodity, mention has been made in the foregoing chapters.

I shall now proceed to inquire more particularly, to what extent they are practised in different countries, how far they are rendered necessary by the operation of natural causes, and in what degree they are reconcileable to the rules of fair and honourable dealing.

The number of hands through which wine usually passes before it reaches the consumer, the great difference of price between the first-rate and the inferior sorts, and the prevailing ignorance with respect to their distinguishing characters, afford so many facilities and temptations to fraud and imposition in this branch of trade, that no buyer, however great his caution, however just his taste, is wholly secure against them. It is undoubtedly the interest of the grower to raise as large a quantity of the prime kinds as he possibly can; and it is equally the interest of the merchant to gain the favour of his customers, by furnishing them with wines which give satisfaction. But, let the growers be ever so honestly inclined, they cannot always supply the commodity in as equal and perfect a state as they could wish: for, not to mention those defects in the nature of the soils, which necessarily restrict the production of fine wines within certain limits, there is a continual variation in the qualities of every sort of wine, accordingly as the seasons prove more or less favourable. Good vintages are, in fact, of much rarer occurrence than is commonly imagined; at least in those countries where the grape does not attain an early maturity. For example, in the Bordelais, the wines of 1819 alone claim superiority among those of the last eight seasons: in the Alto Douro, about ten of the last fifty years have been distinguished by the general excellence of the produce[a]: while, on the banks of the Rhine, the number of propitious years since the commencement of the eighteenth century, does not exceed fifteen. Of the intervening seasons many have been so absolutely bad, as not to allow the grapes to ripen thoroughly, or to be gathered in such condition as to yield a wine fit for drinking. Under these

[a] See APPENDIX, No. V.

circumstances, the farmer, or merchant, who has been so fortunate as to save any portion of the better vintages, uses it for the purpose of mingling with such feeble and perishable wines as would otherwise remain unsaleable, and could not be preserved for any length of time in their natural state. Even in good years, however, there are many wines that rank above the ordinary kinds, which will not bear long keeping, or distant carriage, without some sort of preparation. Thus the wines of Torins, in the Mâconnais, although by no means deficient in spirituosity or flavour, retain their quality a much shorter time, and improve less, when pure, than when they are mixed with the growths of the neighbouring territories of Chénas and Romanèche, which are of a stronger character, though they fetch only about the same price[b]. On the other hand, it is sometimes desirable to mix the rougher and high-coloured red wines with a certain portion of generous white wine, which softens their harshness, and renders them much sooner drinkable than they would otherwise be; for which reason these mixtures are by many preferred to the purer kinds, which require to be long kept, before their full flavour and aroma are developed.

In the Austrian dominions, and other parts of Germany, it was formerly a rule in the wine trade, that, along with every cask of good wine, the buyer should, at the same time, be obliged to take one of inferior quality[c]. This regulation, though calculated to relieve the grower from much risk and trouble, and occasionally to enable individuals to secure a cask of choice quality, must, on the whole, have had an injurious influence on the character of German wines; as it, in a manner, compelled the dealers to equalise their stock, by mixing good and bad together, and to send them thus mingled into the market, as the best sorts which the country was capable of producing.

[b] Manuel du Sommelier, par A. Jullien. 2de Edition. Paris, 1817. P. 102.

[c] Ritter's Weinlehre, p. 123.

The same thing will happen, whenever the demand for any particular class of wines greatly exceeds the supply. The general use of Port wine in England, for instance, has occasioned an increased demand for it at Oporto. The London merchant, in sending his orders, generally requests his correspondent to furnish him with wines of superior quality: but, out of the sixty or seventy thousand pipes annually made in the Cima do Douro, there are, perhaps, scarcely five thousand to which that character will properly apply; and these are not to be found in any one store, but are divided, in different proportions, among the several merchant-exporters. The whole number of pipes commissioned for London may amount to twenty-five thousand. Supposing, then, that five thousand pipes of first-rate wine, if they are to be had, should be sent in their genuine purity, it is evident, that, to complete the order, twenty thousand of inferior quality must be added; and, as a large proportion of the latter would not bear sea-carriage without some preparation, the shipper is forced to mix them with brandy, which, though it may prevent them from spoiling, renders them, in other respects, worse than before, as it destroys what little flavour they originally possessed. If the two sorts of wine come into the market in the respective conditions just mentioned, the one will be eagerly purchased by all who can afford the price; while the other will find few or no buyers, and will probably remain a useless incumbrance in the cellars of the importer. Or, should the difference of value between the two kinds be so great as to deter the majority of his customers from purchasing the first-rate wine, while the profit to be derived from the sale of the inferior is comparatively trifling, the importer will be induced to withhold the best from the market, and to employ it in raising the quality of the others to that standard which shall enable him to command the highest price for the whole. What the London merchant is here supposed to do, is actually performed by the merchant at Oporto. Unable to answer the call for the finest wines, and knowing, besides, that, if he were to send

any considerable portion of them, in a pure state, along with the more common kinds, of which the great bulk of the cargo must necessarily consist, he would run some risk of having the latter returned upon his hands; or, at all events, would in future experience much difficulty in disposing of such part of his stock;—he accordingly resorts to the expedient of mingling the one with the other, so as to bring the whole to a nearly uniform degree of strength and flavour. The consumers of Port, having their palates already habituated to this artificial compound, and being prevented by high duties from repairing to those countries which yield more delicate vintages at a cheaper rate, must rest contented with the manufactured liquor; and their only choice lies between the few samples which have accidentally or designedly been allowed to retain somewhat of their original excellence, and those which, from natural badness or adulteration, are nearly deprived of all pretensions to the character of wine. If it were not that an article sold as genuine really ought to be such, no great blame would attach to the Oporto merchant on this occasion. He only pursues the course which is most conducive to the advancement and permanence of his trade. Nor can those who think themselves obliged to imbibe daily a certain quantity of Port wine, reasonably complain, if he provides them with a regular and plentiful supply of their favourite beverage, of as good quality as the variations of the seasons, the extent of the orders received, and the other circumstances formerly stated, enable him to send.

In those provinces of France which yield the choicest wines, and carry on the most extensive trade in this commodity, the manner of proceeding is somewhat different. There the first-rate growths being always in much request, and readily finding purchasers at the highest prices, are carefully preserved in their genuine purity. If they were mixed with the inferior sorts, the delicate flavours, for which they are chiefly prized, would be almost entirely destroyed; and the value of the compound would not compensate the sacrifice it required. The French merchants, therefore, keeping their finest

wines pure, use only the secondary kinds, especially those which possess much spirit and body, for mixing with such as are of too thin and feeble quality to answer the purposes of commerce. In this way a considerable portion of the ordinary wines of Medoc, and other parts of the Bordelais, are rendered fit for exportation, and come to us under the name of CLARET; bearing about the same relation to the prime growths of the Gironde that common Port wine bears to the finest produce of the Alto Douro. As this species of compound is in general demand, and the district does not afford a sufficient quantity of the stronger kinds for the manufacture, the dealers, as I have already had occasion to mention, are obliged to supply the deficiency by large importations from the more southerly provinces of France, and even to have recourse to the thick and heavy vintages of Spain, which, though deficient in flavour, possess the other requisite qualities. In making these mixtures, the object of the Bordeaux merchant is not to imitate the produce of the first-rate vineyards, which he certainly could not accomplish, though he were to attempt it,—but merely to correct the defects of the common wines of the country, and to enable him to export them in larger quantities than he could otherwise pretend to do. The indefinite term CLARET does not pledge him to furnish wine of any particular growth; and, if he only sells what goes by that name at a moderate price, the light wines of Medoc, strengthened and improved in flavour by an addition of Hermitage, may well satisfy his customers: but, if he vends the compounded liquor as the genuine produce of Latour or Château Margaux, and exacts the price of a first-rate vintage, he resorts to an artifice, which will not succeed with the skilful, and ought not to be practised against the inexperienced.

Although the same observations will, in general, apply to all attempts to counterfeit the choicer wines, yet there are certain kinds, to the distinguishing qualities of which a somewhat nearer approach may be made by artificial admixtures. Of this description are the

luscious sweet wines, the flavours of which, though often very powerful, are less delicate than those of the red class; and are, besides, to a certain degree, obscured by the undecomposed saccharine matter in which these liquors abound. It is probably owing to the last-mentioned circumstance, or to the similarity of the grapes from which they are made, that many of them, though raised on different soils, resemble each other so closely, as to render their discrimination a matter of some nicety. Several of these analogies have been pointed out in the course of the preceding chapters; and they sometimes occur in cases where we should least expect to find them, as, for instance, in the *vin de paille* of the Hermitage, which comes so near to white Constantia in all its qualities, that it might be readily mistaken for that celebrated growth. It is also worthy of remark, that, in proportion as the luscious wines advance in age, their characteristic differences are less perceptible. Thus, Cyprus wine, which every one can recognise, when new, by its tarry taste, gradually loses this disagreeable quality, and becomes at last hardly distinguishable from the thick sweet wines of other countries; and the produce of the Frontignan vine, which, of all the muscadine kinds, possesses at first the most marked taste and perfume, has been found to acquire, by long keeping, the exact flavour of Malaga. These various coincidences probably suggested the idea of forming such imitations of the rarer and more costly varieties of dessert-wines, as might serve as substitutes for them in those countries where the genuine kinds are seldom met with. We have seen, that the Romans contrived, by means of artificial compounds, to supply the place of some of the most esteemed Greek wines, with which, until about the time of Julius Cæsar, they were but scantily provided[d]. The increasing consumption of the capital held forth great encouragement to this species of manufacture, in all parts of the empire where wine was

[d] See Part First, pp. 43, 96.

an article of commerce; and it is not a little remarkable, that the same territory, which furnished the inhabitants of ancient Rome with an ample store of fictitious and adulterine liquors, should still carry on the same trade to the greatest extent. The abundance and variety of muscadine and other rich growths, obtained from the vineyards of Languedoc, give peculiar facilities for the preparation of these spurious wines, of which the dealers in the chief commercial towns of that province have industriously availed themselves. A considerable part of the *picardan*, and other inferior vintages, is appropriated to this purpose; and it is from the laboratories of Cette that great part of those specious compounds issue, which are consumed chiefly by the Germans, and other northern nations, under the names of Malaga, Alicant, Madeira, &c.

If we look into those receipt-books which are in every one's hands, we shall find, that the rules given for the making and imitating of wines with other fruits than the juice of the grape, are chiefly applicable to the sweet kinds. The excess of sugar used in the preparation of these liquors serves to cover the coarse and harsh flavours of the other ingredients; and the manufacturer generally finds it expedient to leave a large portion undecomposed. Were he to prolong the fermentation until a dry wine was produced, it would, in most instances, be found quite intolerable.

As the mixing of foreign wines affords great opportunity for frauds on the revenue, as well as for the introduction of a variety of deleterious compositions which are designed to pass for wine, but have nothing in common with it except the name, the practice has been strictly prohibited by legislative enactments. In the reign of Edward III. we find a law directing that assay of all the wines imported should be made, at least twice a year, in every town; and that such as were found to be spoiled or corrupted should be cast out, and the vessels in which they were contained broken in pieces. It appears, indeed, somewhat doubtful, whether the expressions '*purrez ou corrumpuz*,' in the original, have reference so

much to the sophistication, as to the natural corruption of wines: but that the vintners of that time were guilty of various malpractices, may be inferred from the terms of the preamble, which charges them with selling wines, "*auxiben purrez comme seyns*," at arbitrary and exorbitant prices, to the great injury of the public. By the 12th CAR. II. c. 25, sect. 11, it is ordered, "That no merchant, vintner, wine-cooper, or other person, selling or retailing any wine, shall mingle or utter any Spanish wine mingled with any French wine, or Rhenish wine, cyder, perry, stummed wine, honey, sugar, syrups of sugar, molasses, or any other syrups whatsoever; nor put in any isinglass, brimstone, lime, raisins, juice of raisins, water, nor any other liquor nor ingredients, nor any clary, or other herbs, nor any sort of flesh whatsoever;" and that merchants or wine-coopers so mingling their wines shall forfeit one hundred pounds, and the vintners forty pounds, for every such offence. This statute, which may serve to show the heterogeneous nature of the ingredients commonly employed by fraudulent dealers, is, however, far too indiscriminate in its prohibitions; as it precludes the merchant and vintner not merely from using various materials for heightening and altering the flavours of their wines, but even from having recourse to such substances as are generally acknowledged to be necessary for giving them that brightness and purity, without which they will neither find ready purchasers, nor keep for any length of time. Though repeatedly called into operation as far as concerns the mixture of liquors, I am not aware, that it ever has been enforced against any of the other processes: but that, upon the whole, it has had little effect in stopping the manufacture of fictitious wines, is a matter of just lamentation. The increased demand for particular kinds of foreign wine,—the difficulty of procuring the best growths in sufficient abundance,—the high duties successively imposed on the introduction of the genuine commodity, and various other circumstances affecting its supply and consumption,—have all tended to encourage the manufacture of spurious sorts in this country. That the quantity drunk

under the names of Port and Madeira especially, far exceeds the quantity imported, has long been notorious. The account given by Addison of the practices of the wine-brewers in his time, which, though somewhat highly coloured, there is no reason to suppose exaggerated with respect to the more important particulars, proves how completely they set at nought the interdict above cited. "There is," says that writer in one of his periodical essays[e], "a certain fraternity of chemical operators, who work underground in holes, caverns, and dark retirements, to conceal their mysteries from the eyes and observations of mankind. These subterraneous philosophers are daily employed in the transmutation of liquors, and, by the power of magical drugs and incantations, raising, under the streets of London, the choicest products of the hills and valleys of France. They can squeeze Bourdeaux out of the sloe, and draw Champagne from an apple. Virgil, in that remarkable prophecy,

Incultisque rubens pendebit sentibus uva—

'The ripening grape shall hang on every thorn,'—

seems to have hinted at this art, which can turn a plantation of northern hedges into a vineyard. These adepts are known among one another by the name of wine-brewers; and, I am afraid, do great injury, not only to her majesty's customs, but to the bodies of many of her good subjects."

The same manufacture still flourishes: but the reduction of duty on Cape wines enables the adepts of the present day to employ, as occasion may require, a more substantial and convenient menstruum for their preparations, than that formerly used. By mixing these wines with the lees of other kinds, and tinting and compounding them with various drugs, they endeavour to counterfeit the more costly vintages of Spain and Portugal, and even of France: but,

[e] Tatler, No. 131.

though they may sometimes succeed in imposing on the unwary, the predominant flavour of the produce of the Cape, which, with all their art, they can seldom conceal, generally betrays the nature of the mixtures, and renders them as unpalatable as they are unwholesome and worthless. The high impost on the choicer wines, however, holds forth so strong a temptation to embark in this disreputable trade, that we must lay our account with its continuance, until the return to more moderate and equal rates shall remove the causes from which it has chiefly sprung.

It has been observed, that, by the statute of Charles II., several substances are forbidden to be mixed with wine, which in themselves are not only innoxious, but deemed conducive to its purity and right preservation. In this respect our laws are not singular. The ordinances of the Imperial Diets are conceived in the same spirit; denouncing the use of lime, gypsum, sulphur, and even milk, and passing unnoticed the more censurable adulteration with lead;—in conformity, as it would seem, to the prejudices of the ancients, who, not suspecting the dangers of the practice, often boiled their wines in leaden vessels, while they regarded the admixture of other mineral substances as highly injurious to health[f]. At what period, or in what country, the deadly practice of adding litharge to acescent wines was introduced, is uncertain. Beckmann inclines to the opinion, that it originated, or, at least, was first detected, in France; the earliest mention of that species of sophistication being found in an ordinance of the French police, which bears the date of 1696. That it had been known for some time previously, may, however, be inferred from the fact, that, in the same year, several individuals in the duchy of Wirtemberg were poisoned by drinking wine sweetened with ceruse, of the employment of which the dealers made no secret; appealing to the authority of certain

[f] "Marmore enim et gypso aut calce condita quis non etiam validus expaverit? Imprimis igitur vinum, aqua marina factum, inutile est stomacho, nervis, vesicæ."—Plin. Hist. Nat. xxiii. 2.

learned physicians, who pronounced the practice to be harmless, and sanctioned it by their own example. This defence did not allay the alarm. An inquiry was ordered into all the circumstances of the case: and, by the advice of the court physicians, who assured the government that both litharge and sulphur, but especially the latter when combined with bismuth, were exceedingly unsafe ingredients, the use of these substances in the preparation of wine was thenceforth declared to be a capital crime. In the following year, some offenders against this law were punished by banishment or hard labour; and a wine-cooper at Eslingen, who afterwards ventured to revive this nefarious trade, and had induced several persons, in various places, to follow it, was condemned to lose his head, while the possessors of the adulterated wines were severely fined, and the wines themselves thrown out[g].

This mode of curing, or rather disguising acidity in wines, is unfortunately not altogether unknown in this country; but there is reason to believe, that it is seldom or never resorted to, since the dealers have become apprised of its dangerous consequences. There is, indeed, little occasion for such a remedy in the case of the full and strong vintages, with which we are so abundantly supplied from Spain, Portugal, and Madeira. If employed at all, it can only be for the purpose of correcting the harshness incident to some of the lighter white wines, such as those of the Rhine, Moselle, or the Cape, and the inferior kinds of Teneriffe. When these wines have an unusual degree of sweetness, a darker colour than their age and body seem to warrant, and particularly when the use of them is followed by pains of the stomach, we may presume, that they have been adulterated with lead. The presence of that mineral may be easily detected by adding to such wines a solution of the hydrosulphuret of potash, or water impregnated with sulphuretted hydrogen gas, which gives a black precipitate. The prussiate of potash is occasionally employed

[g] Beckmann, Geschichte der Erfindungen, III. Bd. s. 436—8.

for the same purpose; a drop or two being sufficient to show a white or greyish precipitate in any fluid in which lead is contained.

According to some authors, lead is not the only poisonous metal used in the preparation of wines. The Spaniards are charged with having had recourse to arsenic, and even to corrosive sublimate, in order to fine their vintages, and render them more firm and durable; and the Dutch, also, are said to have prepared in the same manner such French wines as they shipped for their colonies[h]. If these accusations be not unfounded, we may well exclaim with PLINY, "How can wine possibly prove innoxious, when it is mixed with so many destructive ingredients[i]?"

Such, however, is the influence of custom in reconciling the palate to certain tastes, that wines are sometimes rendered more saleable by having qualities imparted to them, which in themselves are absolutely repulsive. We are apt to question the refinement of the ancients, who could relish the adventitious bitterness given to the produce of their vines by means of pitch, rosin, and salt-water; and yet are pleased with the coarse acerbity and astringency which Port wine occasionally receives from the addition of alum, sloes, or oak-bark. We disdain the combination of odoriferous herbs, with which they scented their inferior wines; while our own are not unfrequently perfumed by an admixture of nitrous ether.

As a high colour is generally, though sometimes erroneously, considered a criterion of the excellence of particular wines; and as the vintages of unfavourable seasons are almost always deficient in this particular, it is frequently supplied by artificial means. For this purpose a variety of colouring matters are employed, such as the elder-berry, wortle-berry, privet, beet-root, tournesol (*croton tinctorium*), logwood, Brazil-wood, &c.; all of which, though they

[h] Metodo di conoscere alcune delle piu dannose Adulterazioni che si fanno ai Vini. 8vo. Firenze, 1786.—Deutschland's Weinbau; von J. C. GOTTHARD. 8vo. Erfurt, 1811. II. B. s. 379.

[i] "Tot veneficiis placere cogitur, et miramur noxium esse!"—Hist. Nat. xiv. 20.

may improve the tint, deteriorate the flavour and durability of the wine. It is well known, that Port wines used to be prepared in this manner; and, though the Company of the Alto Douro may have succeeded in extirpating the elder-tree from the district, yet they left the pokeweed (*phytolacca decandra*), the fruit of which has been found to answer equally well. The colour imparted by such materials, however, is seldom a pure red, but approaches more to violet, unless when heightened with alum; and the fraud is apt to betray itself by the flat and herbaceous taste which the liquor acquires. According to CADET, this species of adulteration may be always easily detected by pouring into the suspected wine a solution of sulphate of alumina, and precipitating the alum by potash. If the wine is pure, the precipitate will have a bottle-green colour, more or less dark, according to the natural hue of the wine. Thus the wines of Roussillon and Languedoc exhibit a dark green; those of Burgundy a bright green; and the *vins de pays* a green approaching to grey. If, again, the colouring has been artificial, the following will be the results:—

Tournesol will give a precipitate of	a bright violet colour.
Brazil wood	a brownish red colour.
Elder-berries, or privet	a brownish violet colour.
Wortle-berries	the colour of dirty wine-lees.
Logwood	a lake-red colour[k].

VOGEL recommends the acetate of lead for the same purpose; having remarked, that, of the substances used for colouring wines, none will form a greenish-grey precipitate, like what is obtained from the genuine kinds, by means of the acetate[l]. But the simple test pointed out to me by my friend DR. PROUT is equally satisfactory, and may be applied to the white as well as to the red kinds.

[k] Dictionnaire de Chimie; par C. L. CADET. Paris, 1803. Art. *Vin.*

[l] Journal de Pharmacie. Fevrier, 1818.

On adding ammonia to wines which had the appearance of being genuine, he observed that the precipitate was of an olive-green colour; showing the analogy between the colouring principle and the vegetable blues, most of which are rendered red by acids, and green by alkalies. This conjecture is in some measure confirmed by the recent discovery of M. Breton, professor of chemistry at Paris, with respect to the cause of that disorder in wines known by the name of *tournure*. Wine thus affected acquires a disagreeable taste and smell, loses its red colour, and assumes a dark violet hue; which changes are found to proceed from the presence of carbonate of potash, in consequence of the decomposition of the tartar contained in the liquor. To restore the natural colour and flavour, if the disease be not of long standing, it is only necessary to add a small quantity of tartaric acid, which, combining with the potash, forms cream of tartar, as is shown by the subsequent deposition of crystals[m]. In genuine wines, the colouring matter seems to partake of the character of a lake, partly held in solution by the excess of acid present, and partly combined with the earthy phosphates; for, in the precipitate obtained from these wines by means of ammonia, it appears in union with the triple phosphate of magnesia. Even the white wines of Xerez, Madeira, and Teneriffe, exhibit this mixed precipitate; their colouring matter being probably derived from the red grapes which enter into their composition. In fictitious wines, on the other hand, such as those procured from the black currant, gooseberry, orange, &c. the last-mentioned salt was thrown down by ammonia, but more gradually, in less quantity, and without any admixture.

Though the various sophistications, by means of heterogeneous ingredients, are not all equally reprehensible, it is very certain that none of them is calculated to supply or improve the qualities of genuine wine. Even the communication of artificial flavours derived

[m] Revue Encyclopédique. Novembre, 1823.

from fruits and aromatic herbs, which is the most innocent of any, is apt to infect the liquor with a medicated taste, which, to a delicate palate, is immediately perceptible. The only legitimate mode of bettering wines is by the addition of such constituents of the grape as the deficiencies of particular vintages appear to indicate; and they ought to be employed as much as possible during the fermentation, or before the wine is completely formed. To certain kinds, intended for distant climates, the admixture of a small quantity of brandy may be allowable, but never to such an extent as to overcome the original flavour; otherwise we impair their excellence, and risk their partial decomposition. In general, however, it may be observed, that the necessity for all these expedients will diminish as the culture of the vine improves, and as more skilful methods are adopted in the treatment of its produce. Every one will grant, that prevention is better than cure; but in wine-making, as in other arts, this maxim is too much neglected. I may add, that the anticipated improvement will be greatly accelerated by the removal of those restrictions on trade which prevent us from frequenting the best and cheapest markets for wine, and compel us to receive so many cargoes of indifferent quality; at the same time that they tend to promote the manufacture of spurious compounds, and to encourage all manner of adulteration.

CHAPTER XIV.

OF THE DIETETIC AND MEDICAL QUALITIES OF WINE.

BACCHUS is represented by HESIOD as the dispenser of joys and sorrows. It may be remarked, however, that his gifts are distributed very unequally among those who repair to his altars; that the unallayed joys are confined to a few, and, though lively, are unsubstantial and fleeting in their nature,—while the sorrows are real and permanent, and generally become the portion of his most ardent votaries. They revel, for a time, in feverish gaiety; but the period at length arrives, when the dream of happiness dissolves, and they awake to melancholy and despair. Doomed, for the remainder of their days, to endure the anguish of remorse and irremediable disease, they discover, when it is too late, that, in the pursuit of false pleasure, they have drained the cup of life to its bitterest dregs. If they should happily escape the more formidable bodily ills which follow in the train of intemperance, they never fail to experience its baneful influence on the mind. Perception is blunted; imagination decays; the memory and judgment are enfeebled; the temper becomes irritable and gloomy; and a degree of moral callousness is superinduced, which steels the heart against all the tender feelings and refined sympathies of our nature. Moreover, as every fresh debauch occasions a temporary aberration of intellect, it often happens, especially when a disposition to insanity pre-exists, that reason is shaken from her seat for ever. But, dreadful as this calamity appears in all its forms, it is perhaps an enviable fate, compared to the lot of those victims of imprudence

who retain the full consciousness of their own errors. To them premature death is the least of the evils which they inflict on themselves.

Such are the deplorable effects of the abuse of wine, from which all the exhortations of the moralist, and all the care of the legislator, have been insufficient to preserve mankind. Even philosophers themselves have not been able to resist its allurements; but, forgetting, in their social hours, the salutary rule, that to forbear is to enjoy, have too often obscured their genius, and stained their reputation, by habitual inebriety. Whole nations have been addicted to this destructive vice; and our own country unfortunately cannot plead entire exemption from the reproach, though, at one period, it was described as the refuge of sobriety. "The English," says CAMDEN, in describing the events of the year 1581, "who had hitherto, of all the northern nations, shewn themselves the least addicted to immoderate drinking, and been commended for their sobriety, first learned, in these wars in the Netherlands, to swallow a large quantity of intoxicating liquor, and to destroy their own health by drinking that of others[a]." But this custom appears to have been then of short continuance; for FYNES MORYSON, who published his Travels soon after the commencement of the following century, assures us, that, "in generall, the greater and better part of the English held all excesse blameworthy, and drunkennesse a reprochfull vice[b]." If we are to believe MONTESQUIEU, "Drunkenness predominates over all the world, in proportion to the coldness and humidity of the climate. Go," he observes, "from the equator to our pole, and you will find drunkenness increasing together with the degree of latitude. Go from the same equator to the opposite pole, and you will find drunkenness travelling south, as on this side it travels towards the north[c]." One thing, however, is certain, that

[a] History of Queen Elizabeth, Book III.

[b] Itinerary, Part III. p. 152.

[c] Spirit of Laws, B. XIV. ch. 10.

this propensity is most prevalent among barbarous nations; and it is a consoling reflection to those who contemplate the progress of human affairs, that, if the inventions and usages to which civilization gives birth, appear at times of equivocal advantage, yet they invariably tend to wean us from gross and debasing habits, and to improve our relish for rational and refined enjoyments. A generation has scarcely passed away since it was no uncommon thing to see men of high intellectual acquirements, and of irreproachable character in other respects, protracting the nightly feast, till not only their cares, but their senses, were completely drowned in wine. At present, such disgraceful excess, if ever witnessed, would operate as an effectual and deserved exclusion from all respectable society. It was once the boast of many, that they could indulge in these deep potations with impunity. At present, no one covets the fame of DARIUS, who ordered to be inscribed on his tomb, "that he could drink much wine, and bear it also nobly[d]."

An inquiry into the influence of wine on national character opens an extensive and highly interesting field of disquisition: but the want of accurate data, and the difficulty of separating and clearly distinguishing them from other concomitant circumstances, would probably prevent us from arriving at satisfactory conclusions, or establishing any consistent theory on the subject. Some authors, indeed, have not scrupled to affirm, that in wine-countries the character of the people is commonly analogous to that of their wines; pretending, for example, to discover, in the choice qualities of those of Greece, the causes of its rapid civilization, and of the unrivalled talents for the fine arts, which were so conspicuous in its ancient inhabitants. It must be acknowledged, however, that the natives of wine-countries, with the exception, perhaps, of the Greeks and Persians, are much less prone to intemperance, than

[d] ΗΔΥΝΑΜΗΝ ΚΑΙ ΟΙΝΟΝ ΠΙΝΕΙΝ ΠΟΛΥΝ, ΚΑΙ ΤΟΥΤΟΝ ΦΕΡΕΙΝ ΚΑΛΩΣ.
ATHENÆUS, X. 9.

those nations for whom the attraction of vinous liquors seems to increase, in proportion as they recede from the climates that produce them.

It was the remark of an ancient poet, that the man who drinks wine must necessarily have more exalted thoughts than he who drinks only water; and the followers of the muses, in all ages, seem to have adopted the maxim, and to have offered frequent sacrifices at the shrine of Bacchus. Whether the fire of their verses has always corresponded to the warmth of this devotion, may well be doubted: but the beautiful lyrics we owe to their genius, when confessedly under the inspiration of wine, furnish sufficient proof of its power of occasionally elevating the fancy, and raising that soft tumult of the soul, which enables it to create a world of its own, and to pour forth its conceptions in the sublimest and most harmonious strains. "*Nil mortale loquar*"—is the rapturous exclamation of Horace in one of his happiest invocations of the Lenæan god,—

> "No mortal sound shall shake the willing string,
> The venturous theme my soul alarms,
> But, warmed by thee, the thought of danger charms.
> When vine-crown'd Bacchus leads the way,
> What can his daring votaries dismay[*]?"

It is in this vehement enthusiasm, this agreeable frenzy, that the fascination, and, I may add, the principal danger of wine, to all persons endowed with great sensibility, consist; for with them the passions have the fullest sway, and the most marked alternations of cheerfulness and gloom are apt to prevail:—

> "Dearly bought, the hidden treasure,
> Finer feelings can bestow;
> Chords that vibrate sweetest pleasure,
> Thrill the deepest notes of woe."

[*] Francis's Horace, Ode III. 25.

As the delirium of intoxication advances, the desire to heighten and prolong its influence increases; and in proportion to the strength and duration of the excitement is the degree of depression that succeeds, when the mind exchanges its transporting visions for the sober realities of life. Hence the propensity to renew the state of ideal bliss, by a repetition of the stimulus,—a propensity which, if not resisted in the beginning, soon settles into a confirmed habit. It is, however, with the delights of wine as with the other pleasures of sense;—when indulged in too freely, they lose their sweetest charm; and they are always relished most by those who have sufficient self-command to use them in moderation, and who enjoy them at intervals, amid the more important business of life.

Although, when drunk without restraint, wine can only be considered "a delightful poison," as the Persians, who know it chiefly by its abuse, have appropriately termed it, yet, like other poisons, when administered with judgment and discretion, it is capable of producing the most beneficial effects. Temperately used, it acts as a cordial and stimulant; quickening the action of the heart and arteries, diffusing an agreeable warmth over the body, promoting the different secretions, communicating a sense of increased muscular force, exalting the nervous energy, and banishing all unpleasant feelings from the mind. Even in this light, it is to be viewed rather as a medicine than as a beverage adapted to common use; for a person in sound health can require no such excitement of his frame, and, by frequently inducing this state of preternatural strength, he must, sooner or later, exhaust the vital powers. In certain constitutions, however, wine seems to cause no pleasurable emotions; operating rather as a direct narcotic, and occasioning only stupor, when drunk in excessive quantity.

When introduced into the stomach, vinous liquors may be considered as acting in two ways,—either by their chemical affinities, as they become mixed with the food, or by their stimulant operation on the nervous and muscular systems. Now, there is every reason

to believe, that, in the former point of view, they will not assist the digestion of proper nutriment in the healthy subject, but will have a directly contrary effect, especially if they contain much spirit or acid. If they undergo decomposition, a portion of the saccharine and mucilaginous matter may perhaps enter into the formation of chyme, and a small quantity of the alcohol may be taken up by the absorbents; but this principle constitutes no part of the blood, and cannot therefore remain in the system. The neutral salts will, of course, exert their specific actions on the alimentary canal; or they may enter into partial combination with the food. In weak stomachs, however, where the muscular action is slow, even the purest wine is apt to generate a deleterious acidity; and the stimulant powers of the alcohol, which, in persons of sounder habit, are sufficient to overcome its antiseptic tendency, are thus completely lost. But that, in persons of the strongest frame, wine does not directly forward the process of digestion, is proved by the derangement of the alimentary organs which always succeeds excessive indulgence in its use. Great drinkers, it is well known, are small eaters, and usually terminate their career by losing their appetite altogether.

In general, then, we may conclude, that the good effects of wine, as an article of diet, are referable to its stimulating operation on the nervous and muscular coats of the stomach, by which means that organ is incited to greater action, and the flow of gastric juice is promoted. This excitement will, of course, vary according to the proportion of the spirituous and aromatic constituents, and the quantities of the acids and neutral salts, by which their action may be, to a certain degree, controlled or modified. But, although chemical analysis may assist us so far in tracing the influence of wine on the human system, it is very certain, that this liquor, when of good quality, and fully matured by age, does not operate in the same manner that an artificial mixture of its several constituents would do. The stronger wines, as has been already shown, contain about one-third of proof spirit, or one-sixth of pure alcohol. If

the same quantity of brandy, however, be drunk, diluted with water to the strength of wine, it will produce intoxication more speedily than when taken in the form of wine; and the effect of a mixture of alcohol will be still more injurious. Or, if a liquor be compounded, which shall contain all the principal ingredients of the rich sweet wines, as is the case with punch, it will be found equally unsafe. On what principle these differences are to be explained, is altogether unknown: but that they do not entirely depend upon the union of the alcohol with the other component parts of the wine, appears from the fact, that similar differences are observable in the operation of brandy itself, and other spirits, according to the length of time they have been kept; even when the strength, as far as it can be ascertained by the usual instruments, is exactly the same. The conjecture of Dr. Maccullochi, that alcohol may be subject to varieties of composition, analogous to those which are found in the very variable substances included under the denomination of carburetted hydrogen gas[f], is highly ingenious, and may possibly be one day verified by the application of more perfect methods of analysis, than those which have been hitherto employed.

It is almost superfluous to remark, that, as the stimulant power of wine generally corresponds to the quantity of alcohol which enters into its composition, so this power must be greatly increased in those wines which contain a large proportion of adventitious and imperfectly combined spirit. The ancients, as we have seen, seldom ventured to indulge in pure wine, and even condemned the free use of it, when tempered with only an equal measure of water. What, then, would they have said, had they witnessed the taste of modern times, and of this nation in particular, which, not content with the most potent vintages that can be extracted from the grape, seeks to give them a fictitious strength by the further addition of alcohol! That wines thus compounded are rendered doubly injurious to the

[f] Remarks on the Art of making Wine, p. 143.

constitution, is very certain; for "the habitual use of them," as the author last quoted has justly observed, "must be manifestly equivalent to the habitual use of spirits, or rather to the use of spirits and wine together." Many would doubtless be appalled at the thought of draining a whole quart of pure brandy, who feel no reluctance to swallow an equal quantity of spirit disguised with wine. Some, indeed, there are, whose peculiar temperament enables them to take off large draughts of this inflammatory mixture, without immediately experiencing the bad effects; but let no one flatter himself, that he can continue, for any length of time, to drink even one bottle daily, without impairing his health, and laying the foundation of various maladies, which, as already hinted, are always difficult of cure, and often wholly irremediable.

But it is not to the brandy alone that the noxious effects of certain wines are to be ascribed. If the original fermentation has been imperfect, or if they contain an excess of acids, particularly the gallic or malic acids, their use becomes highly prejudicial, especially to persons of infirm stomachs. When such wines are placed within the temperature of the human body, a renewal of the suppressed fermentation will take place; and what little alcohol they have will rather assist than counteract the acidifying process. Hence the unwholesomeness of most of our domestic wines, which are, in general, but imperfectly fermented, and contain a large portion of malic acid and free saccharine matter, and to many of which brandy is added with the view of increasing their strength. Perhaps, too, the predominant acids may undergo some transmutation in the stomach, which renders their presence still more detrimental. The carbonic acid gas, however, which some of these wines give out in large quantity, cannot be regarded as unwholesome, unless from the distention or commotion which it produces. In mineral waters this ingredient is well known to be both grateful and salutary; and it may partly counteract the deleterious qualities of the half-formed wines with which it is united.

These principles may serve to explain the general operation of vinous liquors on the human system, and the injurious consequences that ensue from the use of bad and adulterated wines. But, as the genuine and more perfect kinds exhibit marked differences in their composition and qualities, so their effects, in a medical as well as dietetic point of view, are liable to great variation. A full inquiry into their modes of action, and the disorders in which they are beneficial or hurtful, would lead to discussions altogether incompatible with my general plan. As the subject, however, possesses considerable interest, and may seem to demand a little further notice, I shall briefly state the few facts which appear to be established with respect to the comparative virtues of some of the principal wines.

1. Among the brisk wines, those of Champagne, though not the strongest, may be considered as the best; and they are certainly the least noxious, even when drunk in considerable quantity. They intoxicate very speedily, probably in consequence of the carbonic acid gas in which they abound, and the volatile state in which their alcohol is held; and the excitement is of a more lively and agreeable character, and shorter duration, than that which is caused by any other species of wine, and the subsequent exhaustion less. Hence the moderate use of such wines has been found occasionally to assist the cure of hypochondriacal affections and other nervous diseases, where the application of an active and diffusible stimulus was indicated. They also possess marked diuretic powers. The opinion which prevails, that they are apt to occasion gout, seems to be contradicted by the infrequency of that disorder in the province where they are made; but they are generally admitted to be prejudicial to those habits in which that disorder is already formed, especially if it has originated from addiction to stronger liquors. With respect to this class of wines, however, it is to be observed, that they are too often drunk in a raw state, when, of course, they must prove least wholesome; and that, in consequence of the want of proper cellars, and other causes which accelerate their consumption,

they are very rarely kept long enough to attain their perfect maturity. It is also worthy of notice, that, in order to preserve their sweetness, and promote effervescence, the manufacturers of Champagne commonly add to each bottle a portion of syrup composed of sugar-candy and cream of tartar; the highly frothing kinds receiving the largest quantity. Therefore, contrary to the prevailing opinion, when the wine sparkleth in the glass, and "moveth itself aright," it is most to be avoided, unless the attributes of age should countervail all its noxious properties.

2. The red wines of Burgundy are distinguished by greater spirituosity, and a powerful aroma. Owing, perhaps, to the predominance of the latter principle, they are much more heating than many other wines which contain a larger proportion of alcohol. Though in the time of Louis XIV. they were prescribed in affections of the chest, no physician of the present day would dream of giving them in such cases. The exhilaration, however, which they cause, is more innocent than that resulting from the use of heavier wines. The better sorts may be sometimes administered with advantage in disorders where stimulant and sub-astringent tonics are required. The same observation will apply to the wines of the Rhone, and the lighter red wines of Spain and Portugal.

3. Possessing less aroma and spirit, but more astringency than the produce of the Burgundy vineyards, the growths of the Bordelais are, perhaps, of all kinds, the safest for daily use; as they rank among the most perfect light wines, and do not excite intoxication so readily as most others. They have, indeed, been condemned by some writers, as productive of gout; but, I apprehend, without much reason. That, with those persons who are in the practice of soaking large quantities of Port and Madeira, an occasional debauch in Claret may bring on a gouty paroxysm, is very possible: but the effect is to be ascribed chiefly to the transition from a strong brandied wine to a lighter beverage, — a transition almost always followed by a greater or less derangement of the digestive organs.

Besides, we must recollect, that the liquor which passes under the denomination of Claret is generally a compounded wine. It is, therefore, unfair to impute to the wines of the Bordelais those mischiefs which, if they do arise in the manner alleged, are probably, in most instances, occasioned by the admixture of other vintages of less wholesome quality.

4. The wines of Oporto, which abound in the astringent principle, and derive additional potency from the brandy added to them previously to exportation, may be serviceable in disorders of the alimentary canal, where gentle tonics are required. But the gallic acid renders them unfit for weak stomachs; and what astringent virtues they show will be found in greater perfection in the wines of Alicant and Rota, which contain more tannin and less acid. The excitement they induce is of a more sluggish nature than that attending the use of the purer French wines, and does not enliven the fancy in the same degree. As a frequent beverage they are unquestionably much more pernicious.

5. For a long time the vintages of Spain, and particularly the SACKS, properly so called, were preferred to all others for medicinal purposes. The wines of Xerez still recommend themselves by the almost total absence of acidity.

6. Of all the strong wines, however, those of Madeira, when of good quality, seem the best adapted to invalids; being equally spirituous as Sherry, but possessing a more delicate flavour and aroma, and, though often slightly acidulous, agreeing better with dyspeptic habits. Some have thought them beneficial in cases of atonic gout, probably without much cause; for, whenever a disposition to inflammatory disorders exists, the utility of any sort of fermented liquor is very doubtful.

7. The lighter wines of the Rhine, and those of the Moselle, are much more refrigerant than any of the preceding, and are frequently prescribed, in the countries where they grow, with a view to their diuretic properties. In certain species of fever, accompanied by

a low pulse and great nervous exhaustion, they have been found to possess considerable efficacy, and may certainly be given with more safety than most other kinds; as the proportion of alcohol in them is small, and its effects are moderated by the presence of free acids. They are also said to be of service in diminishing obesity.

8. It is difficult to conjecture on what circumstances the ancients founded their belief in the innocuous qualities of sweet wines, contrasted with the drier and more fully fermented kinds. They may not intoxicate so speedily, and, as they cloy sooner upon the palate, are, perhaps, generally drunk in greater moderation. When new, they are exceedingly apt to disorder the stomach; and, when used too freely, they produce all the same effects as the heavier dry wines. In their more perfect state, they may answer the purpose of agreeable and useful cordials; but, as the excess of saccharine matter retards their stimulant operation, they ought always to be taken in small quantities at a time.

APPENDIX.

APPENDIX.—No. I.

Note on the Theory of Fermentation.—(P. 5.)

THE following simple and concise statement of the changes produced in the must by fermentation, for which I am indebted to the kindness of DR. PROUT, differs but little, and, indeed, is partly abridged from that given by DR. URE, in his valuable edition of NICHOLSON'S Chemical Dictionary. It may be considered as exhibiting a summary of all that is at present known on the subject, and certainly places in a very clear and satisfactory point of view the accordance of the results of experiment with those which are obtained by calculation.

SUGAR, when pure and crystallized, appears, from the most perfect experiments, to consist of—

1 proportion of hydrogen, by weight .	= 1.25,	or per cent 6.67
1 proportion of carbon	7.50	. 40.00
1 proportion of oxygen	10.00	. 53.33
	18.75	100.00

ALCOHOL, according to the experiments of SAUSSURE, is composed of one proportion of olefiant gas, and one proportion of the vapour of water; or, in other words, of—

3 proportions of hydrogen, by weight .	= 3.75,	or per cent 13.04
2 proportions of carbon	15.00	. 52.17
1 proportion of oxygen	10.00	. 34.79
	28.75	100.00

CARBONIC ACID, again, is formed of—

1 proportion of carbon, by weight .	= 7.5,	or per cent 27.28
2 proportions of oxygen . . .	20.0	. 72.72
	27.5	100.00

Now, if we adopt the estimate deduced by DR. URE from the experiments of LAVOISIER and THENARD, 100 parts of sugar will be converted by fermentation into the following constituents, viz.—

According to LAVOISIER's experiments,—		THENARD's,
Absolute alcohol	50.776	51.453
Carbonic acid	49.224	48.547
	100.000	100.000;

which products are to one another nearly in the proportion of 28.75 to 27.5, or the proportional weights of alcohol and carbonic acid, as before stated. Hence, if, for the sake of round numbers, we consider three proportions of sugar to be resolved into one proportion of alcohol and one proportion of carbonic acid, there will be nothing lost; and the results will approximate very closely to those actually obtained by LAVOISIER and THENARD. Thus,

		Hydrogen.	Carbon.	Oxygen.
3 proportions of sugar . . .	=	3	3	3
1 proportion of alcohol . .	=	3	2	1
1 proportion of carbonic acid .	=	0	1	2
		3	3	3;

being exactly the same proportions. On this supposition, then, the proportional weights of alcohol and of carbonic acid gas, evolved from any given quantity of sugar, ought to be in the same relation to one another as the weights of the proportional numbers, 28.75, 27.5; which, for 100 parts of sugar, will give

51.11 of alcohol, and
48.88 of carbonic acid,

or almost the same numbers that are found by the experimental analysis, as above estimated.

No. II.

Note on the Quantity of Spirit contained in different Wines.—(P. 23.)

The annexed Table, showing the proportional quantity of alcohol contained in different kinds of wine, has been compiled partly from the Table published by Mr. Brande, in the first volume of the Journal of Science and the Arts, and partly from the results of the experiments of Mr. Ziz, an able chemist residing at Mentz, and of those which Dr. Prout most obligingly undertook at my request. Slow distillation was the means of analysis employed by the two last-mentioned chemists; that method appearing more susceptible of precision than any other. In Dr. Prout's experiments, a known quantity of wine was introduced into a retort furnished with a receiver, into the tubulature of which was fixed a long slender glass tube of safety. The distillation was carried on very slowly, till about two-thirds of the wine, and, consequently, the whole of its spirit, had passed into the receiver. The quantity and specific gravity of the distilled fluid were then accurately ascertained; and the proportion of alcohol of sp. gr. 0.825, by bulk, was determined from Gilpin's Tables. In repeated trials, according to this plan, the results were nearly uniform. Mr. Ziz's calculations, on the other hand, were made by the Table of Lowitz, which fixes the standard of alcohol at 0.791. His estimates, therefore, when reduced to the British standard, would be somewhat greater than they appear in the subjoined account.

Having adopted but a small portion of Mr. Brande's Table, I shall briefly explain the motives which have guided me in the selection made from it. The large quantity of alcohol assigned by him to different wines, which were before thought to contain very little, led me at first, along with many others, to suspect some fallacy in his experiments. That idea, however, I have long since abandoned. But, though convinced of the general accuracy of his researches, I am inclined to think, that several of the wines analysed by him must have been mixed with a considerable quantity of adventitious alcohol; which would, of course, render the results of little

value. In one instance, indeed, I have had pretty positive proof, that this conjecture is not unfounded. Mr. Brande commences his Table with the wine of Lissa, which he describes as the strongest of all; the proportion of pure alcohol contained in it being, according to his calculation, not less than 26.47 per cent in one specimen, and 25.41 on the average. When this statement first appeared, it surprised me not a little; as I happened at the time to have in my possession a sample of Lissa wine, which had been obtained from the original importer, and which was so far from showing any unusual degree of spirituosity, that by some of my friends it was mistaken for a species of claret. The analysis of a portion of the same wine by Dr. Prout shows, that the liquor examined by Mr. Brande must have been totally different; and a circumstance which lately occurred has satisfied me, that an adulterated Sicilian wine has been imposed upon him, under the name of Lissa. This will serve to account for the discrepancy, as to this point at least, in our respective Tables.

As the wines of the south of France, which are often prepared expressly for the purpose of distillation, do not yield more than one-third of proof spirit, and those of Malaga and other parts of Andalusia afford about the same quantity, we may, I think, conclude, that, when any recent wine exhibits a larger proportion, it must have received an addition of brandy. I use the term *recent*, because it appears not improbable, that in strong wines, which contain much undecomposed sugar and extractive matter, there may be a further evolution of alcohol, as the insensible fermentation proceeds; raising the total quantity, perhaps, to 18.50 or 19 per cent. In the list subjoined, several of the estimates will be found considerably higher: accordingly, if the above supposition be correct, the inference will follow, that, in such cases, part of the spirit must be adventitious. That many of the wines enumerated are so compounded, is very certain: but it is desirable to expose their artificial strength, as they are unfortunately the kinds best known, and most generally drunk in this country.

TABLE, &c.

	Alcohol sp. gr. ·825 in 100 parts, by measure.	Acid in 100 parts, equal to crystallized Tartaric Acid, by weight.	Specific gravity of Wine.	By whom analysed.
FRENCH WINES.				
Champagne (average of four kinds)	12·61			Brande.
Burgundy (average of four samples)	14·57			Brande.
Ditto (upwards of twenty years in bottle)	12·16			Prout.
Red Hermitage	12·32			Brande.
Frontignan	12·79			Brande.
Côte Rôtie	12·32			Brande.
Claret	12·91			Brande.
Sauterne	14·22			Brande.
Grenache	21·24		1·053	Prout.
SPANISH WINES.				
Sherry (very old)	23·80			Prout.
Ditto (average of four specimens)	19·17			Brande.
Alba Flora	17·26			Brande.
Malaga (1666)	18·94			Brande.
Ditto	17·26			Brande.
PORTUGUESE WINES.				
Port (average of seven specimens)	22 96			Brande.
Ditto	20·64		·9890	Prout.
Ditto (Vinho de Ramo)	15·62			Prout.
Collares	19·75			Brande.
Lisbon	18·94			Brande.
Carcavellos (average of two specimens)	18·65			Brande.
Bucellas	18·49			Brande.
GERMAN WINES.				
Johannisberger (1788)	8·71	9·38	·9978	Prout.
Rüdesheimer (1811)	10·72	6·22	·9937	Prout.
Ditto (1800)	12·22			Ziz.
Oestricher (1801)	8·46		·9960	Ziz.
Zornheimer (1804)	8·75		1·0310	Ziz.
Ditto (1802)	10·16		·9790	Ziz.
Ditto (1803)	9·00		·9960	Ziz.
Oestricher (1804)	10·66		·9920	Ziz.
Ditto (1802)	10·50		·9890	Ziz.
Bodenheimer (1802)	13·96		·9890	Ziz.
Rhenish, submitted to Soemmering's process for four years	7·58	10·58	·9997	Prout.
Same wine in its natural state	7·36	10·05	·9992	Prout.
Rhenish, submitted to Soemmering's process for three years and a half	7·00	8·4	·9968	Prout.

TABLE — continued.

	Alcohol sp. gr. ·825 in 100 parts, by measure.	Acid in 100 parts, equal to crystallized Tartaric Acid, by weight.	Specific gravity of Wine.	By whom analysed.
HUNGARIAN WINE.				
Tokay	9·88	. .	. .	BRANDE.
ITALIAN AND SICILIAN WINES.				
Aleatico	16·20	. .	1·0200	PROUT.
Ætna, or Syracuse	30·00	. .	·9911	PROUT.
Syracuse	15·28	. .	. .	BRANDE.
Marsala, twenty-one years old, submitted to SOEMMERING's process for five years	18·40	. .	. .	PROUT.
Lissa	15·90	. .	·9913	PROUT.
WINES OF MADEIRA AND THE CANARY ISLES.				
Madeira (average of four specimens)	22·27	. .	. .	BRANDE.
Madeira (West India)	21·20	. .	·9908	PROUT.
Malmsey Madeira	16·40	. .	. .	BRANDE.
Teneriffe	19·79	. .	. .	BRANDE.
CAPE WINES.				
Constantia	14·50	. .	1·0810	PROUT.
Stein wine	10·60	. .	. .	PROUT.
PERSIAN WINES.				
Shiraz (white)	19·80	. .	·9944	PROUT.
Ditto (red?)	15·52	. .	. .	BRANDE.

No. III.

Note on the Escape of Alcohol and Aroma during Fermentation.

(P. 151—153.)

Since the time of Stahl it has been generally believed, that a considerable loss of the more volatile constituents of wine occurs during its formation, especially when the process is carried on in open vessels. The experiment of Geoffroy, who found the quantity of spirit increased, when the must was protected by a covering of oil, and the observations of D. Gentil and Chaptal on the vapours collected from fermenting masses, seemed to remove all doubt on the subject. This doctrine, however, has been lately controverted with much ingenuity, and, as appears to me, not without success, by Mr. Delavau, whose highly interesting remarks on the phenomena of fermentation I regret not to have had the advantage of consulting, before my introductory chapter was committed to the press. It would be doing injustice to his reasoning, to abridge the arguments by which he endeavours to prove, that the notion of any large portion of alcohol and aroma being dissipated during fermentation is a mere prejudice, and that the fact is even physically impossible: but the results of his experiments with the Gervais apparatus, which were conducted with the greatest care, and verified in the most satisfactory manner, may be stated in a few words; and they fully warrant the conclusion, that the supposed loss by evaporation has been hitherto much overrated.

A quantity of must procured from grapes of similar quality, gathered and bruised at the same time, was introduced in equal proportions, along with the murk, into three new oaken vats, each containing between four and five hogsheads. On one of these the condensing apparatus was placed. Another had merely a wooden cover closely fitted to it, with a small aperture for the escape of the carbonic acid gas; while the remaining one was

left entirely open. The fermentation continued for nineteen days. At the end of this time the contents of the vats were carefully examined. The difference in the quantities was found to be very trifling. On tasting the three samples of wine, however, it was the unanimous opinion of all the persons present, that the wine from the vat with the simple cover had the most agreeable flavour; and that the produce of the vat with the apparatus was the least fully formed, though tolerably vinous. The quantity of fluid obtained from the condenser did not amount to a wineglassful, or about $\frac{1}{2400}$ part of the whole mass. This liquor was nearly limpid, and had a slightly vinous taste, and a smell resembling aniseed. A portion of the wine from the same vat was afterwards distilled, and gave a spirit of only equal strength with that afforded by the wine which had been fermented in contact with the atmospherical air. The wine from the vat with the simple cover was found to yield the largest proportion of alcohol; the respective numbers standing, by CARTIER's hydrometer, at the temperature of $80\frac{1}{2}$ of FAHRENHEIT, as follow:—

1. From the vat with the condenser . . . . = $16\frac{1}{8}$
2. From the vat with the simple cover . . = $16\frac{3}{8}$
3. From the open vat . . . . . = $16\frac{1}{8}$

These experiments, which were confirmed by other trials of the same apparatus, show how completely it has failed to procure any one of the great advantages ascribed to the employment of it in the manufacture of wine. Useless, however, as it is proved to be, this alleged invention (which, in truth, is only a combination of the distillatory apparatus proposed by M. DE LA PLOMBARIE, and described by him in the 'Journal Economique' for 1757, and the *soupape hydraulique* recommended by M. CASBOIS, in the 'Bibliothèque Salutaire' for 1788), after having made the tour of the French vineyards, may possibly now excite some discussion on our side of the channel: for a notice in one of the late Numbers of the 'Philosophical Magazine' (vol. LXI. p. 34) states, that a patent from the British government has been taken out for it; and that it has been successfully applied, in a large country brewery, to the manufacture of beer. There can be little question, I apprehend, that malt liquors treated on such a plan will prove

of superior quality to those which are fermented in open tuns: but it is of importance our brewers should know, that the same desirable result may be obtained without the employment of so cumbersome an apparatus; which, if it saves only the $\frac{1}{2400}$ part of the produce in wine-making, certainly cannot save a twentieth part, as has been affirmed, in the preparation of beer or ale. In both cases, the use of simple covers to the vats will fully answer the purpose. The head or scum of the fermenting liquor will thus be secured from acetification, of which there is always great risk when the process is performed in open vessels; the temperature, also, of the whole mass, will be more steady, being rendered, in a great measure, independent of the variations in the external air; while there can be no material loss of any of the component principles of the fluid by evaporation, for the portion that escapes with the carbonic acid gas seems to be very inconsiderable.

No. IV.

(A.)

TABLE showing the Extent of Vineyard Lands in each Department of France; together with their average Annual Produce, the Quantities of Wine consumed by the Inhabitants, and the Amount of the Quantities reserved for Commerce, or used in Distillation. From the 'Topographie des Vignobles,' —1822.

Names of the Departments.	Number of Hectares planted.	Hectolitres of Wine produced.	Consumed by the Inhabitants.	Exported or Distilled.
Ain	18,000	300,000	200,000	100,000
Aisne	10,000	320,000	225,000	95,000
Allier	15,000	300,000	110,000	190,000
Alpes (Basses)	10,000	150,000	150,000	
Alpes (Hautes)	7,000	70,000	70,000	
Ardèche	16,000	230,000	122,000	108,000
Ardennes	2,500	80,000	80,000	
Ariège	16,240	103,000	103,000	
Aube	21,000	617,000	300,000	317,000
Aude	35,000	550,000	225,000	325,000
Aveyron	20,000	280,000	280,000	
Bouches-du-Rhône	26,500	513,000	250,000	263,000
Cantal	230	5,500	5,500	
Charente	66,500	960,000	300,000	660,000
Charente-Inférieure	90,600	1,600,000	600,000	1,000,000
Cher	12,000	260,000	150,000	110,000
Corrèze	20,000	260,000	150,000	110,000
Côte-d'Or	25,000	550,000	300,000	250,000
Corse	9,800	260,000	160,000	100,000
Dordogne	72,000	600,000	250,000	350,000
Doubs	8,000	170,000	170,000	
Drôme	25,000	390,000	240,000	150,000
Eure	1,845	60,900	60,900	
Eure-et-Loire	7,000	200,000	150,000	50,000
Gard	100,000	1,200,000	300,000	900,000
Garonne (Haute)	57,300	650,000	220,000	430,000
Gers	74,000	900,000	400,000	500,000
Gironde	110,000	2,200,000	350,000	1,850,000
Hérault	75,000	1,158,000	200,000	958,000
Ille-et-Vilaine	306	7,000	7,000	
Indre	14,000	300,000	150,000	150,000
Indre-et-Loire	36,000	700,000	300,000	400,000
Isère	22,000	450,000	230,000	220,000
Carry forward	1,023,821	16,394,400	6,807,000	9,586,000

TABLE — continued.

Names of the Departments.	Number of Hectares planted.	Hectolitres of Wine produced.	Consumed by the Inhabitants.	Exported or Distilled.
Brought forward	1,023,821	16,394,400	6,807,000	9,586,000
Jura	16,060	300,000	120,000	180,000
Landes	19,500	320,000	168,000	152,000
Loir-et-Cher	28,000	850,000	140,000	710,000
Loire	13,000	217,300	112,000	105,300
Loire (Haute)	4,000	60,200	60,200	
Loire-Inférieure	45,000	900,000	280,000	620,000
Loiret	39,000	1,000,000	250,000	750,000
Lot	47,500	600,000	200,000	400,000
Lot-et-Garonne	60,000	566,500	310,000	256,500
Lozère	800	10,000	10,000	
Maine-et-Loire	35,000	600,000	120,000	480,000
Marne	22,500	680,000	260,000	420,000
Marne (Haute)	17,600	391,000	186,000	205,000
Mayenne	590	12,000	12,000	
Meurthe	13,500	536,000	440,000	96,000
Meuse	15,000	400,000	300,000	100,000
Morbihan	585	13,000	13,000	
Moselle	4,500	177,000	177,000	
Nièvre	12,000	250,000	180,000	70,000
Oise	3,500	124,000	124,000	
Puy-de-Dome	22,000	346,500	180,000	166,500
Pyrénées (Basses)	16,700	302,600	96,000	206,600
Pyrénées (Hautes)	11,000	233,000	100,000	133,000
Pyrénées-Orientales	33,500	300,000	180,000	120,000
Rhin (Bas)	14,390	441,000	200,000	241,000
Rhin (Haut)	15,000	400,000	225,000	175,000
Rhône	25,800	560,000	110,000	450,000
Saône (Haute)	12,000	300,000	200,000	100,000
Saône-et-Loire	30,000	800,000	200,000	600,000
Sarthe	10,350	161,000	161,000	
Seine	4,800	143,000	143,000	
Seine-et-Marne	16,900	514,000	245,000	269,000
Seine-et-Oise	20,000	672,000	400,000	272,000
Sèvres (Deux)	20,000	350,000	160,000	190,000
Somme	34	1,200	1,200	
Tarn	23,000	350,000	185,000	165,000
Tarn-et-Garonne	30,000	400,000	170,000	230,000
Var	42,000	800,000	300,000	500,000
Vaucluse	45,000	400,000	180,000	220,000
Vendée	16,000	345,000	345,000	
Vienne	33,000	550,000	230,000	320,000
Vienne (Haute)	2,970	40,100	40,100	
Vosges	4,000	147,000	147,000	
Yonne	36,000	900,000	250,000	650,000
TOTAL	1,905,900	33,857,800	14,718,900	19,138,900

(B.)

Valuation of the Wines of France, according to the several Qualities.

10,500,000 hectolitres,	at 7 fr. 50 c.	78,750,000 fr.
4,600,000	at 10	46,000,000
3,400,000	at 15	51,000,000
2,300,000	at 20	46,000,000
2,000,000	at 25	50,000,000
1,700,000	at 30	51,000,000
1,600,000	at 35	56,000,000
1,500,000	at 40	60,000,000
1,600,000	at 50	80,000,000
800,000 fine wines,	at 200	160,000,000
30,000,000 hectolitres.	Total value	678,750,000 francs.

NOTE.—The quantity of wine used in distillation is estimated by CHAPTAL at 5,358,890 hectolitres; and the value, being taken at the lowest rate in the above list, gives an additional sum of 40,191,675 francs: so that the total produce of the vines in France may be valued at 718,941,675 francs.

(C.)

Prices of some of the principal French Wines.

1. *Wines of Champagne.—Prices at Epernay in* 1822.

		Per Bottle.				
		Fr.	Ct.		Fr.	Ct.
Vin blanc mousseux Do. blanc non mousseux Do. rosé mousseux Do. rosé non mousseux Do. Ay, crêmant	Vintage 1818 and 1819	4	0	to	4	50
Do. Sillery, *Romont*	Vintage 1815	5	50	—	6	0
Do. Sillery, *sec*		5	0	—	5	50
Do. tisanne	Vintage 1818 and 1819	2	75	—	3	0
Do. rouge de Bouzy et Sillery		3	50	—	0	0
Tisanne de Champagne—in puncheon, gauging 215 to 220 bottles		250	0	—	300	0
Vin rouge, première qualité—ditto, ditto 230 to 240 bottles		350	0	—	450	0
——— seconde qualité—ditto, ditto . ditto		250	0	—	300	0
——— troisième qualité—ditto, ditto . ditto		150	0	—	250	0

2. *Wines of Burgundy.—Prices at Beaune in* 1822.

RED.		In puncheon of 250 bottles.		Old, in bottle.			
		Fr.	Ct.	Fr.	Ct.		Fr.	Ct.
Chambertin Romanée	Vintage of 1819	900	0	5	0	to	0	0
Richebourg St. Georges Corton		800	0	4	0	—	4	50
Vosne Nuits		700	0	3	50	—	4	0
Volnay Pomard Beaune	première qualité	600	0	2	75	—	3	50
Beaune	seconde qualité	300	0					
Chassagne		450	0					
Mercurey		250	0					
Grands ordinaires		150	0					

Wines of Burgundy (continued.)—Prices at Beaune in 1822.

WHITE.	In puncheon of 250 bottles.	Old, in bottle.
	Fr. Ct.	Fr. Ct. to Fr. Ct.
Montrachet	900 0	5 0 to 0 0
Chevalier Montrachet	700 0	3 50 — 0 0
Meursault (Goutte d'Or)	. . .	4 0 — 0 0
Meursault	500 0	2 50 — 0 0
Pouilly	250 0	

3. *Wines of the Rhone.—Prices at Tain in* 1822.

	Puncheon of 210 bottles.	In bottle.
RED.	Francs. Francs.	Francs. Francs.
Hermitage	600 to 1200	3 to 6
Côte Rôtie	600 — 1000	
WHITE.		
Hermitage	600 — 1000	3 — 5
St. Peray	. . .	2 — 3
Vin de paille	. . .	7 — 10
Lunel muscadine (M. Gautier's)—*price at Lunel*	480 — 500	3 — 0

4. *Wines of the Bordelais.—Prices at Bordeaux in* 1815, 1818, *and* 1822.

RED.	1815.	1818.	1822.
Medoc Wines.	Francs.	Francs.	Francs.
Lafitte, Chateau Margaux, Latour — The tun of 821 litres, or 217 gallons	3100	3300	3300
Rauzan, Durfort, Lascombe, Léoville, Larose, Branne-Mouton	2300	2500	——

Wines of the Bordelais (continued.)—Prices at Bordeaux in 1815, 1818, *and* 1822.

RED.	1815.	1818.	1822.
Medoc Wines.	Francs.	Francs.	Francs.
Gorce, Castelnau, Malescot, Cabarrus, Pichon Longueville	1800	2100	——
Gircors, Poujet, Laujac	1500	1650	——
Pontet, Becheville, St. Pierre	1400	1600	——
Pontet Cannet, St. Guiron	1200	1300	——
Wines of the Palus and Entredeux-Mers.			
St. Emilion	. .	. .	500 to 600
Quéyries	. .	. .	450 — 550
Montferrant	. .	. .	280 — 350
Embes	. .	. .	250 — 300
Vins des Côtes	. .	. .	200 — 280
WHITE.			
Sauterne, Barsac, Preignac	650 to 850	650 to 850	700 — 1100
St. Croix du Mont	. .	. .	350 — 500

No. V.

(A.)

An Account of the Number of Pipes of Wine produced in the District of the Alto Douro, with the Qualities of the Vintages, from the Year 1772.

Years.	Quality of Vintages.	Pipes.
1772.	Ordinary	36,407
1773.	Good	23,745
1774.	Ordinary	23,066
1775.	Very fine	55,911
1776.	Light	29,627
1777.	Very bad	27,210
1778.	Ordinary, some good	32,856
1779.	Ordinary, some of high flavour	38,684
1780.	Ordinary	34,483
1781.	Some very good	26,730
1782.	Good, though not generally	27,221
1783.	Middling, some high-flavoured	33,279
1784.	Ordinary	25,425
1785.	Ordinary	38,481
1786.	Good, some fine	31,479
1787.	Ordinary	32,187
1788.	Middling	53,800
1789.	Middling, some very fine	44,673
1790.	Some good	41,223
1791.	Great variety	48,119
1792.	Middling	53,995
1793.	Some good	56,523
1794.	Middling	68,844
1795.	Ordinary, though some good	66,103
1796.	Good	68,274
1797.	Very bad, tawny	56,271
1798.	Very bad	55,716
1799.	Bad	64,251
1800.	Bad	72,484
1801.	Generally bad, though some good	71,658
1802.	Good	46,263
1803.	Good	73,430
1804.	Good	76,655
1805.	Middling	76,550
1806.	Very good	57,869
1807.	Ordinary	54,707
1808.	Middling	56,524
1809.	Middling, but some of high flavour	38,633
1810.	Some good, and of full flavour, but light	36,250
1811.	Some good	42,663
1812.	Good, some very fine	55,913
1813.	Ordinary	——
1814.	Ordinary	——
1815.	Very good	——
1816.	Middling	47,819
1817.	Ordinary	37,422
1818.	Middling, some good	53,831
1819.	Middling, some high-flavoured	73,936
1820.	Very good	70,231
1821.	Very good	——
1822.	Bad, except in those situations where the vintage was early.	——

(B.)

Distribution of the Wines of the Alto Douro, as shipped from Oporto, in the Year 1780; *and Amount of the Exports in the Years* 1781, 1819, *and* 1820.

		Pipes.	Quartas.	Almudes.	Canadas.
	EXPORT WINE.				
1780.	For England	26,626	0	2	6
	For the British Navy	100	0	0	0
	For Lisbon	989	0	4	6
	MIXED WINE, (*Vinho de lotaçaõ do Brasil.*)				
	For Brazil	2,907	2	0	0
	For the British Navy	2,824	2	0	0
	For Petersburgh and the Baltic ports	1,356	3	3	9
	For England	85	1	2	0
	Coastways	72	0	2	0
	Total	34,961	2	4	9
1781.	Total exportation	26,940	0	3	0
1819.	Ditto	21,815	0	0	0
1820.	Ditto	30,475	0	0	0

No. VI.

Prices of some of the principal Rhine Wines, at Mentz, in 1817.

Vintage.		The ohm of 38 gallons.
1811.	Johannisberger, Grafenberger, Markebrunner, Hochheimer.	150 to 500 florins.
1806.	Ditto . ditto . ditto . ditto .	150 — 700
1802.	Ditto . ditto . ditto . ditto .	150 — 600
1794.	Ditto . ditto . ditto . ditto .	200 — 650
1811.	Rüdesheimer, Hochheimer (second quality) . . .	120 — 300
1806.	Ditto . ditto	120 — 250
1802.	Ditto . ditto	150 — 300
1794.	Ditto . ditto	150 — 350
1811.	Geisenheimer, Oestricher, Bodenheimer, Niersteiner . .	80 — 240
1806.	Ditto . ditto . ditto . ditto . . .	90 — 250
1802.	Ditto . ditto . ditto . ditto . . .	100 — 250
1794.	Ditto . ditto . ditto . ditto . . .	150 — 350

		The bottle.
1811.	Hochheimer, Rüdesheimer, Markebrunner . . .	2 to 4 florins.
1806.	Ditto . ditto . ditto	$2\frac{1}{2}$ — 4
1802.	Ditto . ditto . ditto	$2\frac{1}{2}$ — 4
1794.	Ditto . ditto . ditto	$2\frac{1}{2}$ — 6
1783.	Ditto . ditto . ditto	3 — 7
1726.	Ditto . ditto . ditto	7 — 8
——	Old Stein wine	5 — 8
——	Best Leisten wine	4 — 5

NOTE.—The florin is equal to about two shillings English.

No. VII.

Amount of the Number of Leggers of Wine and Brandy brought into Cape Town, from the Year 1804.

Years.	Wine.	Brandy.
1804	6,016	511
1805	5,000	602
1806	4,732	448
1807	5,265	337
1808	2,982	316
1809	5,003	298
1810	4,897	373
1811	6,947	309
1812	5,363	439
1813	6,073	315
1814	5,655	301
1815	9,951	560
1816	8,757	702
1817	12,379	506
1818	7,701	385
1819	8,888	448
1820	11,096	506
1821	11,624	566

NOTE.—The legger contains 50 English gallons nearly.

No. VIII.

(A.)

An Account of the Quantity of Wines imported into England, from Christmas 1696 *to Christmas* 1785*; distinguishing the Quantity and Species of Wine imported in each Year.*

	PORTUGAL.			SPANISH.			FRENCH.			RHENISH.			TOTAL of the Proceedings.		
	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.
1697 .	4,774	1	10	7,897	1	52	2	2	18	412	2	26	13,086	3	43
8 .	4,057	0	48	7,851	3	46	272	1	51	792	3	59	12,974	2	15
9 .	8,703	1	60	11,701	3	60	248	0	9	900	1	22	21,553	3	25
1700 .	7,757	1	47	13,649	0	7	664	2	26	1,430	3	56	23,502	0	10
1701 .	7,408	2	31	11,184	2	17	2,051	3	62	798	1	39	21,443	2	23
2 .	5,924	3	60	7,482	2	30	1,624	0	14	693	3	21	15,725	1	62
3 .	8,845	1	60	1,359	0	52	139	3	46	748	0	10	11,092	2	42
4 .	9,924	2	49	3,020	0	21	198	3	7	667	3	33	13,811	1	57
5 .	8,449	2	59	3,011	1	9	168	0	26	441	1	49	12,070	1	17
6 .	7,709	0	23	2,774	1	21	158	3	3	331	1	47	10,973	2	31
7 .	9,011	3	44	3,277	2	25	103	2	23	568	3	50	12,962	0	16
8 .	9,637	2	24	3,990	1	35	167	1	23	584	3	31	14,380	0	50
9 .	7,651	0	19	4,904	1	58	238	1	51	544	1	46	13,338	1	48
1710 .	6,729	3	18	8,591	0	24	113	3	60	434	1	17	15,869	0	56
1711 .	7,647	3	54	6,786	2	7	532	1	2	514	3	14	15,481	2	14
12 .	6,483	0	36	5,690	1	51	116	0	39	387	2	27	12,677	1	27
13 .	5,975	2	51	7,031	3	10	2,551	2	26	378	0	47	15,937	1	8
14 .	8,965	1	8	8,479	3	23	1,198	1	55	103	3	34	18,747	1	57
15 .	10,721	3	46	9,265	2	7	1,260	2	48	502	3	34	21,751	0	9
16 .	9,105	2	37	7,682	0	56	1,570	1	49	476	1	54	18,834	3	7
17 .	10,340	0	26	9,106	1	60	1,396	1	37	418	3	61	22,260	3	58
18 .	14,617	2	41	6,964	0	12	1,798	1	42	495	1	16	23,875	1	48
19 .	12,171	0	33	6,154	2	62	1,766	2	2	418	0	42	20,510	2	13
1720 .	11,152	1	44	6,093	0	52	1,366	0	36	529	1	38	19,141	0	44
1 .	14,086	3	26	9,484	1	3	1,247	1	20	444	2	59	25,263	0	45
2 .	11,580	0	18	12,063	0	58	1,424	3	16	406	0	13	25,470	0	42
3 .	12,336	3	41	8,549	2	43	1,037	1	8	491	1	35	22,415	1	1
4 .	14,222	3	50	7,372	2	62	1,147	3	57	332	0	28	23,075	3	8

TABLE — continued.

	PORTUGAL.			SPANISH.			FRENCH.			RHENISH.			TOTAL of the Proceedings.		
	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.
1725 .	14,403	2	30	8,762	1	4	1,087	3	14	269	0	50	24,722	3	35
6 .	7,772	3	41	10,530	0	19	633	2	41	397	1	49	19,334	0	24
7 .	12,945	3	35	6,524	0	19	1,085	3	1	509	1	6	21,064	3	61
8 .	18,208	0	58	10,255	2	5	1,105	0	30	476	3	12	30,045	2	32
9 .	14,371	1	25	9,791	0	25	894	0	51	616	1	12	25,672	3	50
1730 .	8,279	2	5	10,427	2	36	636	0	24	480	2	29	19,823	3	31
1 .	13,122	1	58	9,696	0	43	1,007	0	42	413	2	41	24,239	1	58
2 .	10,939	2	37	9,166	1	23	865	2	44	412	1	33	21,384	0	11
3 .	11,162	0	32	9,092	2	15	840	0	17	325	2	56	21,420	1	57
4 .	11,723	1	10	8,392	3	47	780	1	56	367	2	60	21,264	1	47
5 .	13,838	1	0	9,598	1	16	667	2	48	312	0	27	24,416	1	28
6 .	11,367	2	13	8,667	3	54	528	3	4	198	3	2	20,763	0	10
7 .	14,985	1	14	10,673	2	17	633	2	55	312	3	15	26,605	1	38
8 .	11,487	2	10	9,935	2	28	471	2	22	276	3	4	22,171	2	1
9 .	11,747	1	47	6,028	1	14	607	1	61	211	2	32	18,594	3	28
1740 .	7,524	3	28	6,596	0	34	856	2	47	221	1	14	15,198	3	60
1 .	16,559	1	14	249	0	62	165	0	36	204	2	17	17,178	1	3
2 .	15,270	0	20	759	3	26	435	3	59	250	0	16	16,715	3	58
3 .	16,611	2	56	527	3	36	310	1	2	205	1	3	17,655	0	34
4 .	8,028	3	27	1,471	2	18	557	1	10	219	0	5	10,276	2	60
5 .	15,209	2	40	461	1	10	140	3	31	162	2	16	16,034	1	34
6 .	11,450	2	35	505	0	37	86	2	32	162	3	33	12,205	1	11
7 .	13,490	2	30	682	2	42	206	1	41	180	3	45	14,560	2	32
8 .	11,820	1	40	2,706	3	44	414	2	40	193	1	18	15,135	1	16
9 .	13,470	2	29	7,344	2	3	464	2	33	275	1	33	21,555	0	35
1750 .	9,050	0	60	5,714	1	1	418	1	59	272	2	17	15,456	2	11
1 .	10,188	0	47	3,878	1	5	461	1	28	260	0	48	14,788	0	2
2 .	10,132	3	4	2,918	2	50	407	3	8	249	1	53	13,708	2	52
3 .	12,815	0	58	5,175	3	10	623	2	10	242	2	5	18,857	0	20
4 .	10,036	1	9	4,168	1	30	559	1	11	219	0	0	14,982	3	50
5 .	11,022	3	34	4,657	2	8	650	1	34	213	3	9	16,544	2	22
6 .	7,841	0	20	3,669	3	55	554	3	44	198	2	25	12,264	2	18
7 .	11,066	2	24	2,461	2	12	350	3	24	171	2	33	14,050	2	30
8 .	10,826	1	27	4,613	1	12	274	0	55	182	2	23	15,896	1	54
9 .	11,669	2	44	3,233	3	52	338	2	3	163	1	46	15,405	2	19
1760 .	10,986	3	33	3,843	1	50	377	2	37	219	3	53	15,427	3	47
1 .	9,622	0	10	4,244	3	36	546	2	16	189	1	47	14,602	3	46
2 .	12,995	2	33	2,611	1	12	303	3	49	186	0	33	16,097	0	1
3 .	12,936	3	39	3,504	3	47	441	2	61	199	1	0	17,082	3	21
4 .	13,046	3	59	3,720	3	8	446	1	7	176	1	31	17,390	1	42

TABLE—continued.

	PORTUGAL.			SPANISH.			FRENCH.			RHENISH.			TOTAL of the Proceedings.		
	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.
1765 .	13,506	1	34	3,854	1	31	540	2	26	230	3	39	18,132	1	4
6 .	13,135	3	37	4,633	0	8	497	3	7	205	1	25	18,472	0	14
7 .	12,619	1	39	3,697	2	38	545	1	59	225	0	58	17,087	3	5
8 .	14,311	3	36	3,649	3	26	441	2	39	176	3	12	18,580	0	58
9 .	13,760	1	17	3,970	3	42	460	2	3	179	3	31	18,371	2	30
1770 .	11,919	3	18	4,194	3	59	468	2	27	140	2	62	16,724	0	40
1 .	12,396	2	7	3,777	0	49	535	3	20	164	3	62	16,874	2	12
2 .	11,957	3	52	3,012	2	28	475	3	17	151	1	8	15,597	2	42
3 .	11,847	0	44	3,965	0	12	494	1	61	125	0	39	16,431	3	20
4 .	13,773	2	39	3,532	1	28	560	0	52	125	0	37	17,992	1	20
5 .	12,658	3	61	4,419	1	58	497	1	43	160	0	40	17,736	0	13
6 .	12,755	1	13	3,416	3	51	434	3	48	126	3	50	16,734	0	36
7 .	14,482	0	55	2,982	0	5	602	1	35	151	0	28	18,217	2	60
8 .	11,871	1	46	3,764	3	49	595	2	3	111	1	16	16,343	0	51
9 .	10,127	2	9	2,180	2	52	363	1	34	88	3	41	12,760	2	10
1780 .	17,107	1	48	2,902	2	30	376	1	33	128	0	54	20,514	2	39
1 .	10,963	0	28	1,875	1	46	378	3	38	94	1	34	13,311	3	20
2 .	8,063	0	58	1,051	3	15	456	3	14	219	1	15	9,791	0	39
3 .	10,908	1	56	2,149	1	23	370	0	33	196	2	2	13,624	1	51
4 .	11,434	3	13	2,553	3	41	385	2	46	124	3	19	14,499	0	56
5 .	11,750	0	25	2,534	1	34	391	3	34	130	3	56	14,807	1	27

10 Years' Average . .	to 1706 inclusive . .	15,622	
—— Ditto . . .	to 1716	15,997	
—— Ditto . . .	to 1726	22,602	
—— Ditto . . .	to 1736	23,109	
—— Ditto . . .	to 1746	17,631	Tuns, imported.
—— Ditto . . .	to 1756	15,784	
—— Ditto . . .	to 1766	16,255	
—— Ditto . . .	to 1776	17,212	
9 Years' Average . .	to 1785	14,873	

APPENDIX.—No. VIII.

(B.)

An Account of the Importation of Wines of all Descriptions, distinguishing the Countries from which they came; from the Year 1785 *to the present Time, distinguishing each Year.*

QUANTITIES IMPORTED INTO GREAT BRITAIN.

YEARS.	OF FRANCE.			OF SPAIN.			OF THE CANARIES.			OF PORTUGAL.			OF MADEIRA.			OF THE RHINE.			OF THE CAPE OF GOOD HOPE.			OF ALL OTHER SORTS.			TOTAL OF ALL SORTS.		
	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.	Tuns.	Hds.	Gall.
1785 . . .	470	1	41	2,769	3	8	65	2	35	12,171	0	61/2	613	2	26	133	3	47	. . . . .			62	3	21	16,287	0	581/2
1786 . . .	475	2	16	3,139	3	11	69	1	44	11,770	1	37	526	2	9	187	3	52	. . . . .			73	1	10	16,242	3	53
1787 . . .	2,127	3	20	4,216	0	16	83	2	39	16,087	0	13	578	1	41	177	1	32	. . . . .			54	0	61	23,324	3	33
1788 . . .	1,445	1	45	4,701	3	7	118	0	46	18,039	3	27	1,074	2	13	138	2	27	. . . . .			42	2	13	25,560	3	52
1789 . . .	1,114	3	26	3,999	0	14	27	2	48	19,839	1	35	1,174	1	12	117	0	6	. . . . .			27	1	45	26,299	2	60
1790 . . .	1,101	2	52	4,868	3	0	139	1	50	21,431	3	22	1,464	3	45	122	1	26	. . . . .			15	3	7	29,144	3	13
1791 . . .	1,137	0	43	6,519	3	11	77	1	62	23,606	0	17	1,623	2	58	128	1	40	. . . . .			22	2	54	33,115	1	33
1792 . . .	1,617	1	9	5,395	0	20	158	1	27	26,938	3	23	1,252	0	42	139	1	1	. . . . .			24	3	55	35,525	3	51
1793 . . .	1,590	0	11	4,363	2	47	57	0	37	15,629	2	9	1,007	3	0	110	2	27	. . . . .			30	0	35	22,788	3	40
1794 . . .	757	3	25	6,160	1	25	186	1	24	22,229	3	40	783	2	10	129	1	37	. . . . .			12	0	30	30,259	2	2
1795 . . .	1,347	2	49	8,088	3	62	136	0	38	25,286	2	1	699	3	52	36	0	1	. . . . .			13	2	40	35,608	3	54
1796 . . .	1,809	3	38	6,092	2	18	122	1	38	15,017	2	58	501	1	23	54	0	12	. . . . .			95	1	39	23,693	1	37
1797 . . .	850	0	2	2,259	0	57	1	1	45	12,420	2	14	287	3	0	48	1	15	. . . . .			37	1	23	15,904	2	30
1798 . . .	1,577	0	49	3,571	1	30	434	1	15	16,956	3	11	659	0	17	61	3	56	. . . . .			27	0	60	23,287	3	49
1799 . . .	1,662	0	61	6,676	3	15	.	.	.	24,300	1	10	671	0	41	92	3	45	. . . . .			16	1	24	33,419	3	7
1800 . . .	2,078	1	15	8,354	3	15	55	0	12	20,738	0	47	967	2	42	119	2	18	. . . . .			18	3	3	32,332	1	26
1801 . . .	2,506	3	36	6,335	3	61	37	1	40	28,669	1	27	1,177	0	54	105	3	45	45	2	57	60	2	10	38,893	1	21
1802 . . .	1,236	1	61	5,325	1	58	137	3	21	22,023	0	7	1,497	3	38	114	2	4	15	3	58	71	3	53	30,407	0	53
1803 . . .	1,445	0	9	6,871	2	56	113	3	61	27,682	3	53	1,564	0	1	58	0	42	13	1	31	177	2	29	37,913	1	62
1804 . . .	1,425	3	0	6,646	3	29	199	1	59	9,849	2	3	1,075	0	40	34	3	2	8	3	8	188	0	58	19,419	3	2
1805 . . .	2,593	1	5	9,393	2	25	229	0	53	20,003	0	61	1,101	3	41	121	0	56	0	2	14	20	3	3	33,463	0	55
1806 . . .	5,393	1	40	8,264	3	1	537	3	47	19,848	1	38	1,605	2	61	103	1	57	9	0	57	156	2	0	35,910	0	55
1807 . . .	5,438	1	33	7,640	3	28	608	0	46	23,914	1	62	1,981	3	32	44	0	59	20	3	49	161	3	21	39,789	3	29
1808 . . .	7,838	0	58	11,986	2	8	1,683	1	28	22,093	0	16	2,790	0	50	6	2	8	178	1	30	746	0	7	47,143	3	49
1809 . . .	13,105	0	33	10,939	0	46	1,659	0	12	20,578	1	61	2,902	1	44	43	2	5	16	0	36	535	0	5	49,762	3	17
1810 . . .	4,117	0	52	10,168	1	21	1,563	3	44	27,360	0	39	2,353	1	24	133	1	9	19	3	41	1,362	2	25	47,058	3	25
1811 . . .	3,441	2	57	4,541	3	22	1,139	3	51	9,260	2	19	1,518	0	33	10	0	39	8	2	19	874	3	35	20,787	1	4
1812 . . .	5,100	1	7¼	8,068	2	24	2,266	2	33¾	15,007	3	28	2,035	2	47½	23	1	30¼	40	2	56	2,539	0	42¾	35,082	1	17½
1814 . . .	3,902	3	32¼	5,635	1	58¼	2,039	0	44½	15,498	0	48¾	2,018	2	50¼	126	3	56½	349	3	55	1,894	1	5½	31,465	2	36
1815 . . .	2,116	1	17¼	5,148	0	38	2,327	3	41½	16,913	0	60	1,826	0	11½	140	3	18½	1,512	1	4	889	1	19	30,874	0	20¾
1816 . . .	1,612	0	46⅜	3,392	2	15	835	0	3	8,215	0	35⅖	1,512	1	3⅕	121	2	42⅕	1,631	2	21⅖	897	3	15⅕	18,218	0	57⅓
1817 . . .	802	2	17⅗	4,796	2	7⅘	1,132	2	40	14,125	1	36⅘	1,270	2	58⅕	85	0	28⅗	4,218	0	29	641	3	35⅗	27,073	0	1⅘
1818 . . .	1,798	2	6	6,935	1	16⅖	1,762	1	34	17,944	2	4¾	2,316	2	47⅘	153	2	62⅖	3,648	0	15⅗	1,204	1	12	35,763	2	9⅘
1819 . . .	1,543	1	39½	4,363	2	56	1,578	0	54⅗	10,311	1	24⅗	2,922	0	28⅕	120	1	60⅗	1,648	3	19⅗	919	2	11⅗	23,407	0	33 7/10
1820 . . .	1,090	3	30¼	4,302	3	48 1/10	1,071	1	15 7/10	10,598	1	24⅕	2,617	1	61⅕	130	1	58 7/10	1,925	0	60⅘	1,044	3	8⅗	22,781	1	55 7/10
1821 . . .	1,057	1	6 2/10	4,286	2	22 2/10	892	3	42	12,092	3	13 2/10	2,411	2	44 3/10	110	1	45 13/20	2,113	2	12 10/10	1,159	3	5	24,125	0	2 2/10
1822 . . .	1,193	0	17 11/20	5,475	1	14 7/20	810	0	3 5/20	14,814	2	20	2,046	1	59 10/20	115	3	31 6/20	2,244	0	2 17/20	755	1	2 4/20	27,454	2	25

NOTE.—The Records of the year 1813 were destroyed by fire.

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(C.)

An Account of the present Rates of Duty on Wines, and the previous Rates in 1782 *and* 1786.

	Duties increased in 1782.			Reduced in 1786.			Rates since 1819.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
FRENCH Wine, imported in a British Ship: the Tun of 252 gallons	99	8	$9\frac{12}{20}$	50	16	6	144	7	6
——— in a foreign Ship	104	7	$9\frac{12}{20}$	.	.	.	148	11	6
PORTUGAL Wine, in a British Ship	49	14	$4\frac{16}{20}$	32	16	6	95	11	0
——— in a foreign Ship	54	13	$4\frac{16}{20}$	.	.	.	98	14	0
SPANISH and LEVANT Wines, in a British Ship	50	16	$4\frac{16}{20}$	32	16	6	95	11	0
——— in a foreign Ship	55	15	$4\frac{16}{20}$	.	.	.	98	14	0
RHENISH, GERMAN, and HUNGARY Wines, in a British Ship	54	13	$4\frac{16}{20}$	54	13	4	118	13	0
——— in a foreign Ship	59	12	$4\frac{16}{20}$	.	.	.	122	17	0
MADEIRA Wine, in a British Ship	49	14	$4\frac{16}{20}$	32	16	6	96	12	0
——— in a foreign Ship	54	13	$4\frac{16}{20}$	.	.	.	99	15	0
CAPE Wine, in a British Ship	50	16	$4\frac{16}{20}$	32	16	6	31	17	0
——— in a foreign Ship	55	15	$4\frac{16}{20}$	.	.	.	32	18	0

No. IX.

(A.)

Table of Greek Wine Measures.

Μετρητὴς (Cadus).	Χοῦς (Congius).	Ξέστης (Sextarius).	Κοτύλη (Hemina).	Τέταρτον (Quartarius).	Ὀξύβαφον (Acetabulum).	Κύαθος.	Κόγχη.	Μύστρον (Ligula).	Χήμη.	Κοχλιάριον.
1	12	72	144	288	576	864	1728	3456	4320	8640
	1	6	12	24	48	72	144	288	360	720
		1	2	4	8	12	24	48	60	120
			1	2	4	6	12	24	30	60
				1	2	3	6	12	15	30
					1	1·5	3	6	7·5	15
						1	2	4	5	10
							1	2	2·5	5
								1	1·25	2.5
									1	2
										1

(B.)

Greek Wine Measures, reduced to French and English Measures.

	FRENCH.			ENGLISH.		
	Centimetres.	Pintes.	Litres.	Inches.	C. Inches.	Gallons.
1. Pythian, or Delphic foot	24·3443	. .	. .	9·6845	. .	. .
μετρητὴς	. .	15·746	15·07225	. .	919·81	3·9819
χοῦς	. .	1·312165	1·25602	. .	76·6509	·331833
ξέστης	. .	·218692	·209336	. .	12·7751	·0553
κοτύλη	. .	·109346	·104668	. .	6·3875	·0276525
2. Olympic foot . . .	30·963	. .	. .	12·151	. .	. .
μετρητὴς	. .	30·811	29·4055	. .	1794.56	7·76866
χοῦς	. .	2·58025	2·4504	. .	149.5466	·6473873
ξέστης	. .	·43004	·4084	. .	24.9244	·1078978
κοτύλη	. .	·21502	·2042	. .	12.4622	·05394894
3. Πυγμὴ, or mean foot .	31·2903	. .	. .	12·316364	. .	. .
μετρητὴς	. .	32·074	30·623	. .	1868·76	8·08684
χοῦς	. .	2·67283	2·5519	. .	155·73	·6739
ξέστης	. .	·44547	·4253	. .	25·955	·1123172
κοτύλη	. .	·22273	·21265	. .	12 9775	·0561586
4. Πυγὼν, or great foot .	32·1396	. .	. .	12·66334	. .	. .
μετρητὴς	. .	34·8618	33·2714	. .	2030·494	8·79
χοῦς	. .	2·90515	2·7681	. .	167·5412	·7325
ξέστης	. .	·48419	·46135	. .	27·9235	·12283
κοτύλη	. .	·24209	·23066	. .	13·9617	·061416

(C.)

Table of Roman Wine Measures, reduced to French and English Measures.

Culeus.	Amphora.	Urna.	Congius.	Sextarius.	Hemina.	Quartarius.	Acetabulum.	Cyathus.	Ligula.	FRENCH. Pintes.	FRENCH. Litres.	ENGLISH. Gallons.
1	20	40	160	960	1920	3840	7680	11520	46080	539·58325	513·354824	135·65513916
	1	2	8	48	96	192	384	576	2304	26·97916	25·667741	6·7827569
		1	4	24	48	96	192	288	1152	13·48958	12·83387	3·3913784
			1	6	12	24	48	72	288	3·372395	3·208467	·8478446
				1	2	4	8	12	48	·562066	·534744	·1414607
					1	2	4	6	24	·281033	·267372	·0707303
						1	2	3	12	·140516	·133686	·035365
							1	1·5	6	·070258	·066843	·0176825
								1	4	·04684	·044562	·011788
									1	·01174	·011140	·002947

(D.)

English Wine Measures.

Tun.	Pipes.	Puncheons.	Hogsheads.	Tierces.	Gallons.	Quarts.	Pints.	Litres. Decilitres.
1	2	3	4	6	252	1008	2016	= 953·8045
	1	1½	2	3	126	504	1008	= 476·9018
		1	1½	2	84	336	672	= 238·4509
			1	1½	63	252	504	= 317·9345
				1	42	168	336	= 158·9673
					1	4	8	= 3·3788
						1	2	= 0·9463
							1	= 0·4731

NOTE.—The standard guage for foreign wines is as follows:—

The pipe of Port	138 gallons.
——— Lisbon, Bucellas, and Carcavellos	140
——— Madeira	110
——— Barcelona and Vidonia	120
The butt of Sherry	120
——— Mountain	126
The hogshead of Claret	57
——— Tent	63
The ohm of Hock	36
——— Cape	20

(E.)

Old French Wine Measures, according to Romé de l'Isle, *reduced to modern French and English Measures.*

	FRENCH.		ENGLISH.
	Pintes.	Litres.	Gallons.
Tonneau de Marine	1512	1438·2234	381·233
Tonneau de Bordeaux	864	821·842	217·847
Tonneau d'Orléans	576	547·89466	145·232
Queue de Bourgogne	432	410·92087	108·92366
Queue de Champagne	384	365·263	96·821
Muid, or Poinçon	288	273·94733	72·616
Barrique, or Demi-queue de Bourgogne	216	205·46044	54·46192
Demi-queue de Champagne	192	182·6315	48·4106
Feuillette	144	136·97366	36·308
Quartaut	72	68·4868	18·154
Barril	36	34·2434	9·077
Demi-Barril	18	17·12171	4·5385
Broc	12	11·41447	3·02566
Velte, or Septier	8	7·60965	2·017108
Gallon	4	3·8048	1·008554
Quarte, or Pot	2	1·9024	·504277
Pinte	1	·951206	·2521385
Chopine, or Setier	·5	·475603	·12606925
Demi-Setier	·25	·237801	·0630346
Poisson	·125	·1189	·0315173
Demi-Poisson	·0625	·05945	·01575865
Roquille	·03125	·029725	·0078793
Cubic Inch	·02083	·019817	·00525288

(F.)

TABLE, containing a Comparison of the Wine Measures of different Places; viz. 1*st, the Contents of a single Measure in English Cubic Inches;* 2*d, in English Gallons;* 3*d, in French Litres; and,* 4*th, the Number of Gallons, &c., of each place that are equal to* 100 *English Gallons. (Abridged, with some Corrections, from Dr.* KELLY'S *'Universal Cambist.')*

		Contents of a single Measure of each sort.			Number of each equal to 100 English Gallons.
		Cubic Inches.	Eng. Gallons.	Fr. Litres.	
Abyssinia	Cuba	62	0·268	1·016	373·134
Alicant	Cantara	705	3·052	11·554	32·765
Amsterdam	Stekan	1184	5·126	19·403	19·508
Ancona	Soma	5241	22·698	85·917	4·405
Antwerp	Stoop	167	0·726	2·748	137·741
Aragon	Cantara	629	2·724	10·313	36·710
Augsburg	Mass	90·3	0·391	1·479	255·754
Barcelona	Carga	7552	32·695	123·756	3·058
Basel	Ohm	3053	13·215	50·026	7·567
Bastia	Barile	8543	36·986	140·000	2·703
Bayonne	Velte	451	1·952	7·390	51·229
Bergamo	Brenta	4441	19·223	72·761	5·202
Berlin	Anker	2285·5	9·894	37·450	10·107
Berne	Mass	102	0·441	1·671	226·757
Bologna	Corba	4503	19·493	73·782	5·130
Bordeaux	Barrique	14033	60·748	229·937	1·646
	Velte	438	1·896	7·177	52·742
Bremen	Stübgen	194·5	0·842	3·187	118·764
Breslau	Eimer	3389	14·670	55·532	6·816
Brunswick	Stübgen	224	0·969	3·669	103·199
Burgundy	Quartaut	6275	27·161	102·822	3·685
Canary Isles	Arroba	981	4·245	16·073	23·557
Cassel	Quartlin	499	2·160	8·175	46·296
Champagne	Quartaut	5496	23·789	90·057	4·203
Cologne	Viertel	365	1·580	5·980	63·291
Constantinople	Almud	319	1·381	5·227	72·411

TABLE — continued.

		Contents of a single Measure of each sort.			Number of each equal to 100 English Gallons.
		Cubic Inches.	Eng. Gallons.	Fr. Litres.	
Copenhagen	Viertel	471·5	2·041	7·726	48·995
	Anker	2298	9·947	37.655	10·049
Corfu	Barile	4158	18·000	68·133	5·555
Cyprus	Cusa	608	2·633	9·967	37·092
Dantzic	Ohm	9142	39·572	149·756	2·527
Dresden	Eimer	4128	17·870	67·639	5·596
Dunkirk	Lot	140	0·608	2·302	164·473
England	Gallon	231	1·000	3·785	100·000
Erfurt	Eimer	4398	19·040	72·072	5·252
Faro	Almude	1131	4·896	18·532	20·425
Ferrara	Mastello	3379·5	14·630	55·378	6·835
Fiume	Orna	3253	14·082	53·303	7·101
Florence	Barile	2781·7	12·042	45·584	8·304
France	Velte	465	2·017	7·609	49·677
	Hectolitre	6102·8	26·419	100·000	3·785
Francfort	Viertel	450	1·948	7·373	51·334
Galicia	Moyo	9886	42·798	161·991	2·336
Geneva	Setier	2760	11·948	45·224	8·369
Genoa	Barile	4530	19·610	74·225	5·099
Hamburg	Ahm	8836	38·250	144·786	2·614
Hanover	Ahm	9493	41·095	155·552	2·433
Heidelberg	Maass	140·4	0·607	2·300	164·744
Hungary, Upper	Eimer	4474	19·368	73·316	5·163
Hungary, Lower	Eimer	3472	15·030	56·892	6·653
	Tokay Anthal	3084	13·350	50·534	7·490
Ireland	Gallon	217·6	0·942	3·565	106·157
Königsberg	Stof	87·5	0·378	1·433	264·550
Leghorn	Barile	2781	12·042	45·584	8·304
Leipsic	Eimer	4644	20·102	76·099	4·974
Libau	Oxhoft	14436	62·487	236·458	1·600
Lindau	Quart	140	0·606	2·294	165·016
Lisbon	Almude	1009·5	4·370	16·541	22·883
Lisle	Lot	126	0·545	2·064	183·486

TABLE — continued.

		Contents of a single Measure of each sort.			Number of each equal to 100 English Gallons.
		Cubic Inches.	Eng. Gallons.	Fr. Litres.	
Lubec	Viertel	441·9	1·913	7·241	52·273
Lyon	Asnée	5038	21·809	82·549	4·585
Majorca	Quartin	1655·8	7·168	27·131	13·951
Malaga	Arroba	967	4·186	15·850	23·889
Marseille	Millerolle	3924·7	16·990	64·330	5·886
Mentz	Maass	114	0·493	1·868	202·839
Messina	Salma	5331	23·079	87·360	4·333
Milan	Brenta	4357·5	18·865	71·405	5·301
Minorca	Gerra	736	3·187	12·063	31·377
Montpellier	Velte	465	2·017	7·609	49·677
Munich	Eimer	2252	9·750	37·020	10·256
Nantes	Barrique	14645	63·405	240·000	1·577
Naples	Barile	2544	11·013	41 685	9·080
Netherlands	Vat	6102·8	26·419	100·000	3·785
Nice	Rubbio	479·5	2·076	7·857	48·169
Nüremberg	Eimer Visiermass.	4149	17·959	67·984	5·567
	Eimer Schenkmass	3872	16·761	63·439	5·966
Oldenburg	Oxhoft	15230	65·930	249·558	1·516
Oporto	Almude	1555	6·731	25·480	14·856
Osnaburg	Viertel	298	1·290	4·883	77·519
Oviedo	Cantara	1177	5·098	19·286	19·615
Pernau	Anker	2364	10·233	38·736	9·772
Poland	Garniec	97	0·419	1·590	238·663
Prague	Eimer	3916	16·950	64·167	5·899
Prussia	Eimer	4192	18·145	68·690	5·511
Ragusa	Barile	4704	20·363	77·075	4·911
Ratisbon	Great Eimer	6934	30·014	113·620	3·331
	Berg Eimer	5359	23·196	87·812	4·311
Reval	Anker	2580	11·172	42·276	8·951
Riga	Anker	2386	10·333	39·097	9·677
Rio de Janeiro	Medida	161·7	0·700	2·651	142·857
Rochelle	Barrique	10636	46·039	174·279	2·172
Rome	Barile	3560·4	15·413	58·341	6·488
Rostock	Anker	2209	9·562	36·199	10·458
Rotterdam	Ahm	9238·4	39·993	151·380	2·500
Rouen	Barrique	11940	51·688	195·648	1·934
Russia	Vedro	750	3·246	12·289	30·887

TABLE — continued.

		Contents of a single Measure of each sort.			Number of each equal to 100 English Gallons.
		Cubic Inches.	Eng. Gallons.	Fr. Litres.	
Schaffhausen	Mass	80	0·346	1·311	289·017
Scotland	Pint	103·4	0·447	1·694	223·713
Spain	Arroba	981	4·245	16·073	23·557
Stralsund	Stübgen	237	1·027	3·883	97·371
Strasburg	Ohm	2813	12·176	46·093	8·212
Sweden	Kann	159·6	0·691	2·615	144·717
Trieste	Orna	3452	14·942	56·564	6·692
Tunis	Millerolle	3924·7	16·990	64·330	5·886
Turin	Rubbio	573	2·480	9·389	40·322
Valencia	Arroba	719	3·112	11·786	32·133
Venice	Secchio	659	2·853	10·800	35·051
Verona	Brenta	4417	19·199	72·337	5·230
Vienna	Eimer	3452	14·942	56·564	6·692
Wismar	Viertel	441·9	1·913	7·241	52·273
Zante	Barile	4071	17·625	66·707	5·673
Zell	Stübgen	237	1·025	3·883	97·561
Zurich	Land Maass	111·3	0·481	1·823	207·900
	City Maass	100·2	0·433	1·642	230·946

No. X.

ADDITIONAL NOTES AND CORRECTIONS.

P. 15.—*Ban des Vendanges.*

During the Revolution, the practice of annually fixing, by public proclamation, the time for commencing the vintage, had been allowed to fall into desuetude in most of the wine-districts of France: but it has since been re-established, and has even been introduced into some provinces where it was formerly unknown. On the banks of the Rhine, also, I find, that the same usage still continues. Count Chaptal defends this remnant of feudal law; believing, that the superiority of the vintages in Burgundy and the Bordelais may, in a great measure, be ascribed to its strict observance in those countries. But I agree with M. Bosc in thinking, that it rather tends to check all improvement in the manufacture of wine; and that, in the management of the vintage, each proprietor ought to be left to act according to his own discretion. One strong proof of the correctness of the latter opinion is, that the above-mentioned regulation has not been revived in the Bordelais; where, however, there has been no complaint of any degeneracy in the quality of the wines, since the growers have been at liberty to gather their grapes whenever they judged expedient. The various inconveniencies of the opposite course of proceeding have been fully exposed in a judicious memoir by M. Cels, published in the 26th volume of the 'Annales d'Agriculture.'

P. 34.—*Ancient Wine Measures.*

In estimating the produce of a vineyard, absolute precision can hardly be required: but, as I have ventured to question the calculations of others, it becomes the more necessary to explain the origin of some discrepancies

between the statements in the text, and the Tables of Measures given in the Appendix (No. IX.);—though they are not, I trust, of such magnitude as to affect the scope of my observations in any essential particular. One slight inaccuracy has arisen from my having inconsiderately adopted ARBUTHNOT's estimate of the Paris pint, which he describes as equal to the English quart; whereas, if we take BELIDOR's estimate of 58·075 English cubic inches, the contents of the Roman amphora must be reckoned at 6·7827569, and the culeus at 135·65513916 gallons. The hogshead has been generally calculated at 60 gallons, which is the mean between the Tent and the Claret hogsheads.

P. 71.—*Price of old Wine at Rome.*

Some of my readers may think, that I have set down too low a sum as the price of Opimian wine, after it had been kept for a hundred and sixty years. But it is to be observed, that the calculation does not proceed on the principle of compound interest, which PLINY evidently excludes by the phrase, "usura civilis ac modica;" and that, even by the most moderate computation, the value of the wine is raised to ten times the original cost. ARBUTHNOT, who has adopted the reading of BUDÆUS,—"singulas uncias *binis* constitisse,"—calculates the quart at double the sum stated in p. 71, or thirteen shillings English: while HARDOUIN, who seems to delight in magnifying the prices of all ancient commodities, makes the value of the ounce amount to 960 sestertii, or very near four pounds sterling! The more sober estimate of LANGWITH accords, in my opinion, better with the context; and his remarks on the probable corruption of the passage appear to justify the inference, that the true reading is—"singulas uncias HS constitisse."

The *sestertius* is by ARBUTHNOT considered equal to about $1\frac{3}{4}$ pence English,—ten sestertii amounting to one shilling and sevenpence halfpenny; which agrees very exactly with the rate of two livres *tournois*, as given in the Tables of ROMÉ DE L'ISLE. If the value of the precious metals had always continued the same, this would probably be a true estimate: but, in all such computations, as MR. SAY has clearly demonstrated, it is not enough that we reduce to our current money the quantity of gold or

silver contained in ancient coins; we must also take into account the variations in the value of the metals themselves. In the time of Julius Cæsar, we find that twelve ounces of silver were exchanged for one ounce of gold. As silver has since fallen to one-fourth of its ancient value, it follows, that an ounce of gold was then worth as much as forty-eight ounces of pure silver are at the present time; and, as forty-eight ounces of silver are at present worth nearly three ounces of gold, we may infer, that one ounce of gold was anciently worth as much as three ounces now are. According to this view of the matter, the sestertius would be equal to about sixpence sterling, and the price of the bottle of Opimian wine would be raised to nineteen shillings and sixpence, which is about the value of a bottle of very old Rhine wine.

P. 89.—*Colour of Falernian Wine.*

Confiding in the authority of Galen and Dioscorides, I have not hesitated to reject the prevalent opinion as to the colour of Falernian wine, and to call white that which the commentators, with one accord, pronounce to have been black. It is true, that several passages of the poets, and, among others, one which is rather misplaced in p. 107, may be cited in support of the latter position: but they can be all easily reconciled with the view that has been taken of the general qualities of Falernum. In those passages of Martial, for example, where the epithet '*nigrum*' is applied to this wine, it is clear, that the poet alludes merely to the dark colour which a white or yellow wine acquires from age; as in the following lines:—

"Candida nigrescant vetulo crystalla Falerno."—Epig. viii. 77.

"Amphora nunc petitur nigri cariosa Falerni."—Epig. xi. 50.

In the verse formerly quoted,—

"Condantur parco fusca Falerna vitro,"—Epig. ii. 40,

we find the colour assigned as brown; which would not agree with the supposition of the wine belonging to the black or dark-red class. Yet a passage of Silius Italicus seems to point to a red wine:—

" ———— Vilisque rubenti
Fluxit mulctra mero, et quercu in cratera cavata
Dulcis odoratis humor sudavit ab uvis.
En cape, Bacchus ait, nondum tibi nota, sed olim
Viticolæ nomen pervulgatura Falerni."—Punic. vii. 189.

This description, however, evidently applies to wine newly made; which, if procured from a mixture of black and white grapes, would be more or less tinted, according to the degree of force used in expressing the must. All the above allusions to the colour of Falernian, therefore, far from contradicting the statements in the text, only tend to confirm and illustrate them; as they show that the analogies which have been pointed out between the ancient wine and certain modern vintages hold true in every particular.

P. 162.—*Management of the Vintage in Burgundy.*

The description of the mode of conducting the fermentation of the grapes in Burgundy is partly copied from notes made on the spot, in the autumn of 1822: but, as I unfortunately did not arrive there in time to witness the vintage, my information is less satisfactory than I could wish, and possibly, in some respects, erroneous. The practice of fermenting the grapes without any previous treading, I understood to have been but lately introduced in Medoc; and, on further consideration, it certainly appears to me very questionable, whether such a mode of proceeding could be followed in the manufacture of wines that are allowed to remain for so short a time in the vat as those of Burgundy. Maupin and other writers, who have described the method of fermentation pursued in that province, state, that the grapes, after being freed from the stalks, are frequently trodden at the vineyard in the tubs in which they are collected; and that the treading is sometimes repeated in the vat. But, since this account was published, it is probable, that a better system of management has been introduced.

While upon the subject of Burgundy wines, I may be permitted to explain a remark concerning them (p. 139), which, perhaps, is liable to misconstruction. By the assertion, that their vinous qualities are occasionally sacrificed, in order to preserve their aroma, I mean not to deny their spirituosity, which is well known to be considerable, but merely to convey the idea of their being of a less firm and durable character, than

they might be rendered by a longer fermentation. Though, by protracting the process, there may be some risk of acidity, especially if open vats are used,—yet, on the other hand, when the wine is drawn off too soon, it is apt to continue for a long time in a disturbed state, and to exhibit signs of fretting. It is probably owing to this circumstance, that so few of the wines of Burgundy will bear distant carriage.

P. 279.—*Prices of Wine in the Reign of King John.*

The remainder of the passage quoted from the 'Burton Annals,' concerning the prices of wine in the first year of King JOHN, is as follows: "Præterea statuit quod nullum sextarium vini Pictavensis vendatur carius quam pro IV^{d}. et nullum sextarium vini albi carius quam VI^{d}. Statuit etiam quod omnia tonella quæ de cetero venient in Angliam, postquam venerint de *Rech*, post tempus præsentis musti, sint de mutatione. Idem statuit, quod nullum vinum ematur ad regretariam de vinis quæ applicuerint in Angliam. Sed hoc primum regis statutum, vix inchoatum, statim est adnihilatum, quia mercatores hanc assisam sustinere non poterant, et data est licentia vendendi sextarium de vino rubro pro VI den. et de vino albo pro VIII den. et sic repleta est terra potu et potatoribus." HARRISON has rendered 'sextarium' by the term 'gallon;' but the account of the prices of wine in gross will not justify this translation. The larger French *setier* is equal to eight quarts; and DUCANGE says, "Sextarius vini apud Anglos continet 4 jalones." According to the latter estimate, the price of the gallon would be only one penny for red wines, and three farthings for white; which accords sufficiently with the sums payable for the tun. The place called 'Rech' in the statute, was probably the Isle of Ré, opposite Rochelle.

P. 286.—*Garnarde.*

Both RITSON and WARTON consider 'garnarde' to be synonymous with 'garnache;' but a line in CHAUCER's First Prologue seems to prove, that it is a corruption of 'Granada;' and means, therefore, wine from that province,—perhaps the wine of Malaga:—

> "In Garnade at the siege had he bee,
> At Algezer, and riden in Belmary."

P. 289.— *Wine of Lepe.*

On the authority of BAUDRAND, I have stated, that Lepe is the same as the modern Niebla; but the place which CHAUCER had in view is more likely to have been the small town of Lepe, on the sea-coast, between Ayamonte and Palos, which has been long celebrated for its raisins, figs, and wine.

P. 296.—*Vernage.*

Although the references to BACCI will be found to justify the account that has been given of the colour of Vernage, as made in the Genoese territory, whence the chief supply was probably obtained, it appears from another passage (p. 304), which I had overlooked, that the wine known by the same denomination in Tuscany was always of a white or golden colour. The best was grown at San Gemignano, and, in BACCI's time, was in great request at Rome. This, therefore, is the Vernaccia in which Pope MARTIN IV. used to stew his Bolsena eels,—a refinement of luxury for which DANTE makes him suffer in purgatory:—

"——————— e purga per digiuno
L'anguille di Bolsena in la Vernaccia."

LANDINO, in his Commentary on the 'Purgatorio' (XXIV. 24), calls it *gustoso vin bianco.* It is still occasionally met with at Florence.

P. 296.— *Wine of Tyre.*

Among the very few particulars concerning the history of wines that are to be collected from the trifling compilation of CANONIERI, I find a notice of the wine of Tyre, which shows that it was not unknown in Europe at the time when HARRISON wrote. It is described by JULIUS ALEXANDRINUS, who was physician to the Emperor CHARLES V., as one of the wines imported to Germany that bore distant carriage best. In the catalogue of the merchandise of Tyre, given by EZEKIEL (ch. XXVII. v. 18), there is mention of the wine of Chalybon, Χαλιβώνιον, which came from Damascus, and was the only kind, as we learn from ATHENÆUS, that the kings of Persia drank.

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